

**Rules and Regulations
Water Appropriation Act
Division of Water Resources
Kansas Department of Agriculture
October 24, 2003**

K.A.R. 5-1-1. Definitions. As used in these regulations and the Kansas water appropriation act, and by the division of water resources in the administration of the Kansas water appropriation act, unless the context clearly requires otherwise, the following words and phrases shall have the meanings ascribed to them in this regulation.

(a) "Above-baseflow stage" means streamflow that is in response to a significant runoff event during which period the water level elevation of the stream is greater than the elevation of the adjacent water table.

(b) "Acceptable quality surface water" means surface water that will not degrade the quality of the groundwater source into which it is discharged.

(c) "Application" means the formal document submitted on the form prescribed by the chief engineer for a permit to appropriate water for beneficial use and filed in the office of the chief engineer as provided by K.S.A. 82a-708a and 82a-709, and amendments thereto.

(d) "Approval of application" means a permit to proceed with construction of diversion works and the diversion and use of water in accordance with the terms and conditions set forth in the permit. Approval of application shall not constitute any permit that may be required by other state laws.

(e) "Aquifer storage" means the act of storing water in the unsaturated portion of an aquifer by artificial recharge for subsequent diversion and beneficial use.

(f) "Aquifer storage and recovery system" means the physical infrastructure that meets the following conditions:

(1) Is constructed and operated for artificial recharge, storage, and recovery of source water; and

(2) consists of apparatus for diversion, treatment, recharge, storage, extraction, and distribution.

(g) "Artificial recharge" means the use of source water to artificially replenish the water supply in an aquifer.

(h) "Authorized representative" means any staff employee designated by the chief engineer to perform duties and functions on behalf of the chief engineer.

(i) "Bank storage" means water absorbed by and temporarily stored in the banks and bed of a stream during above-baseflow stage.

(j) "Bank storage well" means a well used to divert or withdraw water from bank storage.

(k) "Basin storage area" means the portion of the aquifer's unsaturated zone used for aquifer storage that has defined horizontal boundaries and is delimited by the highest and lowest index water level elevations.

(l) "Basin storage loss" means that portion of artificial recharge naturally flowing or discharging from the basin storage area.

(m) "Basin term permit" means a term permit to appropriate surface water from a stream within a specific drainage basin, or a portion of it, for a reasonable quantity of water, not to exceed a maximum of 100 acre-feet per calendar year, for use in either of the following:

- (1) Drilling oil and gas wells; or
- (2) construction projects within the specified basin.

(n) "Battery of wells" means two or more wells connected to a common pump by a manifold, or not more than four wells in the same local source of supply within a 300-foot-radius circle that are being operated by pumps not to exceed a total maximum rate of diversion of 800 gallons per minute and that supply water to a common distribution system.

(o) "Beneficial uses of water" are the following:

- (1) Domestic uses;
- (2) stockwatering;
- (3) municipal uses;
- (4) irrigation;
- (5) industrial uses;
- (6) recreational uses;
- (7) waterpower;
- (8) artificial recharge;
- (9) hydraulic dredging;
- (10) contamination remediation;
- (11) dewatering;
- (12) fire protection;
- (13) thermal exchange; and
- (14) sediment control in a reservoir.

(p) "Complete and accurate water use report" means a water use report that the water right owner has filed pursuant to K.S.A. 82a-732, and amendments thereto, that provided all of the information required on the form prescribed by the chief engineer, including the following:

- (1) The quantity of water diverted during the calendar year;

(2) if the diversion of water was required to be metered during the calendar year for which the report is being filed, the information required by K.A.R. 5-3-5e;

(3) if the water was used for irrigation purposes, the number of acres that were irrigated; and

(4) if the water was diverted from a sand and gravel pit operation, the size of the surface area of the pit in acres at the end of the calendar year for which the report was filed.

(q) "Completed substantially as shown on aerial photograph, topographic map, or plat," as used to define the authorized point of diversion, means within 300 feet of the location as shown on the aerial photograph, topographic map, or plat accompanying the application.

(r) "Confined Dakota aquifer system" means that portion of the Dakota aquifer system overlain by Graneros shale.

(s) "Conjunctive use" means the safe-yield management and operation of an aquifer in coordination with a surface water system to enhance the use of the total water supply availability in accordance with the provisions of the water appropriation act.

(t) "Contamination remediation" means the diversion of water by a state agency, or under a written agreement or order of an appropriate state agency, for the purpose of improving the water quality.

(u) "Dakota aquifer system" shall include the Dakota formation, the Kiowa formation, the Cheyenne sandstone, and, where hydraulically connected, the Morrison formation.

(v) "Dakota aquifer system well" means a well or proposed well screened in whole or in part in the Dakota aquifer system.

(w) "Dam" means any artificial barrier, together with all appurtenant works, that does or could impound water.

(x) "Dewatering" means the removal of surface water or groundwater to achieve either of the following:

- (1) Facilitate the construction of a building, pipeline, or other facility; or
- (2) protect a building, levee, mining activity, or other facility.

(y) "Direct diversion of surface water" means the diversion of surface water directly from a stream by means of a pump, headgate, siphon, or similar installation, for application to beneficial use without storing it behind a dam, levee, or similar type of structure.

(z) "Diversion" means the act of bringing water under control by means of a well, pump, dam, or other device for delivery and distribution for the proposed use.

(aa) "Diversion works" means any well, pump, power unit, power source, dam, and any other devices necessary to bring water under control for delivery to a distribution system by which the water will be distributed to the proposed use and any other equipment required as a condition of the permit, including a check valve, water level measurement tube, meter, or other measuring device.

(bb) "Division" means the division of water resources of the Kansas department of agriculture.

(cc) "Dry hydrant" means a permanent, unpressurized intake pipe used to remove water from a pond, stream, reservoir, or other surface water supply by means of suction or vacuum supplied by a fire truck or other portable pumping device.

(dd) "Field inspection" means that for the purpose of issuing a certificate of appropriation pursuant to K.S.A. 82a-714 and amendments thereto, the chief engineer conducts a test of the rate of diversion of the diversion works under the normal and maximum conditions that the diversion works actually applied water to beneficial use during the perfection period. The chief engineer also collects all other information necessary to prepare a certificate, including the following:

(1) A description of the location and size of the place where water was actually applied to beneficial use during the perfection period in accordance with the terms, conditions, and limitations of the approval of application;

(2) information on the quantity and rate of water that was applied to the authorized use during the perfection period; and

(3) the actual location of the point or points of diversion from which water was diverted in accordance with the terms, conditions, and limitations of the approval of application.

(ee) "Fire protection" means the use of water for fire protection by a fire department for public protection in general.

(ff) "Fish farming" means the controlled cultivation and harvest of aquatic animals.

(gg) "Flow-straightening vanes" means vanes, or other device installed at the upstream throat of a measuring chamber for the purpose of aligning all velocity components of flow parallel with the flow in the measuring chamber at the water flowmeter sensor location.

(hh) "Full irrigation" means the application of water to crops during the growing season. Full irrigation shall include water for preirrigation.

(ii) "Groundwater" means water below the surface of the earth.

(jj) "Growing season" means the average frost-free period of the year.

(kk) "Household purposes" means the use of water by a person for cooking, cleaning, washing, bathing, human consumption, rest room facilities, fire protection, and other uses normally associated with the operation of a household.

(1) "Fire protection" shall be considered to be use of water for "household purposes" if either of the following conditions is met:

(A) Water is available from a "dry hydrant" that has been installed on a pond located within 1,000 feet of the residence.

(B) Water can be pumped from a well located within 1,000 feet of the residence for fire protection.

(2) Household purposes shall also include the replacement of the potential net evaporation from a domestic pond of up to ½ acre in surface area if both of the following conditions are met:

(A) The pond is utilized for aesthetic purposes as an integral part of the landscaping of a house.

(B) Any portion of the pond is located within 300 feet of the closest edge of the house.

(3) The maximum reasonable annual quantity of groundwater that may be pumped into a pond to be withdrawn later for domestic fire protection shall not exceed 0.06 acre-feet plus the average annual potential net evaporation for a pond at that location in the state having a surface area of 0.2 of an acre.

(4) Household purposes shall also include the use of 1½ acre-feet of water or less per calendar year by an industrial user, restaurant, hotel, motel, church, camp, correctional facility, educational institution, or similar entity for household purposes.

(ll) "Hydraulic dredging" means the removal of saturated aggregate from a stream channel, pit, or quarry by means of hydraulic suction and the pumping of the aggregate and water mixture as a slurry to a location where at least 95% of the water returns directly to the source of supply.

(mm) "Immediate vicinity," as used in specifying the place of use for a water right in which the water is authorized to be used for municipal purposes, means within 2,640 feet of the corporate limits of the municipality, rural water district, or other entity.

(nn) "In compliance" means that a water flowmeter does not meet any of the criteria of K.A.R. 5-1-9 for being out of compliance.

(oo) "Index water level" means water level elevations established spatially throughout a basin storage area to be used to represent the maximum volume of a basin storage area, and storage available for recovery based upon accounting methodology, and conditions of the permit.

(pp) "Indirect use" means the total of the seepage loss and the average annual potential net evaporation loss from the surface of water originally impounded in a reservoir for beneficial use.

(qq) "Industrial use" means the use of water in connection with the manufacture, production, transport, or storage of products, or the use of water in connection with providing

commercial services, including water used in connection with steam electric power plants, greenhouses, fish farms, poultry operations that are not incidental to the operation of a traditional farmstead pursuant to K.S.A. 82a-701 (c) and amendments thereto, secondary and tertiary oil recovery, air conditioning, heat pumps, equipment cooling, and all uses of water associated with the removal of aggregate for commercial purposes except the following:

(1) The evaporation caused by exposing the groundwater table or increasing the surface area of a stream, lake, pit, or quarry by excavation or dredging, unless the evaporation has a substantially adverse impact on the area groundwater supply; and

(2) hydraulic dredging.

(rr) "Irrigation use" means the use of water for the following:

(1) The growing of crops;

(2) the watering of gardens, orchards, and lawns exceeding two acres in area; and

(3) the watering of golf courses, parks, cemeteries, athletic fields, racetrack grounds, and similar facilities.

(ss) "Measuring chamber" means a cylindrical chamber in which a water flowmeter is installed that is calibrated to match the measuring element of the water flowmeter and the nominal size of the pipe in which it is installed.

(tt) "Municipal use" means the various uses made of water delivered through a common distribution system operated by any of the following:

(1) A municipality;

(2) a rural water district;

(3) a water district;

(4) a public wholesale water supply district;

(5) any person or entity serving 10 or more hookups for residences or mobile homes; or

(6) any other similar entity distributing water to other water users for various purposes.

Municipal use shall also include the use of water by restaurants, hotels, motels, churches, camps, correctional facilities, educational institutions, and similar entities using water that does not qualify as a domestic use.

(uu) "Nonvolatile memory" means the ability of a water flowmeter to retain the values stored in the mechanical or electronic memory if all power, including backup battery power, is removed.

(vv) "Normal operating range" means the range of flow rates for which the water flowmeter will meet the accuracy requirements of K.A.R. 5-1-4(a), as certified by the water flowmeter manufacturer.

(ww) "Off-season irrigation" means the application of water to land for the purpose of storing moisture in the soil for future use by a crop that will not be irrigated during the growing season.

(xx) "Operator," as used in the regulation of sand and gravel pits, means any person who engages in mining sand or gravel, or both.

(yy) "Perfect" means the actions taken by a water user to develop an approval of application into a water right. These actions shall consist of the completion of the diversion works and the actual application of water to the authorized beneficial use in accordance with the terms, conditions, and limitations of the approval of application.

(zz) "Point of diversion" means the point at which water is diverted or withdrawn from a source of water supply.

(aaa) "Point of diversion for storage of surface water in a reservoir created by a dam" means the point at which the longitudinal axis of the dam crosses the centerline of the stream impounded by the reservoir.

(bbb) "Potential annual runoff" means the mean annual runoff for the watershed of the reservoir.

(ccc) "Preirrigation" means the application of water to the land for a crop before planting to ensure adequate moisture for early plant growth.

(ddd) "Primary well" means a well for which a standby well is available.

(eee) "Prior right" means a vested right, an appropriation right with earlier priority, or a permit with earlier priority than that of a subsequent appropriation right or permit.

(fff) "Proven reserves" means extractable sand and gravel deposits for which good estimates of the quantity and quality have been made by various means, including core drilling.

(ggg) "Recharge" means the natural infiltration of surface water or rainfall into an aquifer from its catchment area.

(hhh) "Recharge credit" means the quantity of water that is stored in the basin storage area and that is available for subsequent appropriation for beneficial use by the operator of the aquifer storage and recovery system.

(iii) "Recreation storage" means the storage and use of water within the reservoir for recreational use as defined in this regulation. Water stored for recreation use in a reservoir shall be considered to be an indirect use of water.

(jjj) "Recreational use" means a use of water in accordance with a water right that provides entertainment, enjoyment, relaxation, and fish and wildlife benefits.

(kkk) "Rediversion of water" means releasing or withdrawing water that had been previously impounded behind a dam, levee, or similar type of structure, by use of a pump, outlet tube, headgate, or similar type of device, and the application of the water directly to beneficial use.

(lll) "Register" means an integral or remote device that displays the quantity of water passing the water flowmeter sensor and is part of the water flowmeter.

(mmm) "Reservoir" means the area upstream from a dam that contains, or will contain, impounded water.

(nnn) "Reservoir capacity" means the volume of water that can be stored below the lower of either of the following:

- (1) The elevation of the principal spillway tube; or
- (2) the lowest uncontrolled spillway in the reservoir.

(ooo) "Reservoir having a total water volume of less than 15 acre-feet," as used in K.S.A. 82a-728 and amendments thereto, means a reservoir having a capacity of 15 acre-feet or less as measured at the principal spillway tube or the lowest uncontrolled spillway, whichever is lower.

(ppp) "Safe yield" means the long-term sustainable yield of the source of supply, including hydraulically connected surface water or groundwater.

(qqq) "Sand and gravel pit operation" means a project that meets the following conditions:

- (1) Excavates overburden for mining sand or gravel, or both, exposing the underlying groundwater table to evaporation; and
- (2) has a perimeter equal to or greater than its depth.

(rrr) "Sediment control in a reservoir" means a beneficial use of water that meets both of the following criteria:

- (1) The water is stored in a reservoir that has no other authorized type of beneficial use, except domestic use.
- (2) The water is stored only in the part of the reservoir designed and constructed for the storage of sediment.

(sss) "Source water" means water used for artificial recharge that meets the following conditions:

- (1) Is available for appropriation for beneficial use;
- (2) is above base-flow stage in the stream;
- (3) is not needed to satisfy minimum desirable streamflow requirements; and
- (4) will not degrade the ambient groundwater quality in the basin storage area.

(ttt) "Specialty crop" means a crop other than a normal Kansas field crop. This term shall include turf grass, trees, vegetables, ornamentals, and other similar crops.

(uuu) "Standby well" means a well that can withdraw water from the same source of supply as the primary well and that is used only when water is temporarily unavailable from the primary well or wells authorized to be used on the same place of use because of mechanical failure, maintenance, or power failure. A standby well may also be used for fire protection or a similar type of emergency.

(vvv) "Static water level" means the depth below land surface at which the top of the groundwater is found when not affected by recent pumping.

(www)(1) "Stockwatering" means the watering of livestock and other uses of water directly related to either of the following:

(A) The operation of a feedlot with the capacity to confine 1,000 or more head of cattle; or

(B) any other confined livestock operation or dairy that would divert 15 or more acre-feet of water per calendar year.

(2) Stockwatering shall not include the irrigation of feed grains or other crops.

(3) For the purposes of this subsection, a group of feedlots or other confined feeding operations shall be considered to be one feedlot or confined feeding operation if both of these conditions are met:

(A) There are common feeding or other physical facilities.

(B) The group of facilities is under common management.

(xxx) "Straight pipe" means a straight length of pipe free of all internal obstructions, including size changes, valves, cooling coils, injection ports, sand or foreign material, and any other condition that would cause a disturbance of the internal velocity profile in the pipe. Internal obstructions shall not include properly designed, constructed, and installed straightening vanes and inspection ports.

(yyy) "Stream channel aquifer" means unconsolidated water-bearing deposits in river valleys, flood plains, and terraces that are separate and distinct from any other aquifer and capable of yielding water in sufficient quantities for beneficial use.

(zzz) "Surface water" means water in creeks, rivers, or other watercourses, and in reservoirs, lakes, and ponds.

(aaaa) "Term permit" means a permit to appropriate water issued for a specified period of time. At the end of the specified time, or any authorized extension of it, the permit shall be automatically dismissed, and any priority it may have had shall be forfeited.

(bbbb) "The production and return of saltwater in connection with the operation of oil and gas wells in accordance with the written approval granted therefor by the Kansas corporation

commission pursuant to K.S.A. 55-901, and amendments thereto" means only that saltwater actually produced during the primary production of oil and gas wells and shall not include the following:

- (1) Saltwater used in the drilling of an oil and gas well; and
- (2) saltwater injected into an enhanced recovery injection well, unless that saltwater was produced in the primary production of the oil and gas well, separated from the oil and gas, and then subsequently reinjected.

(cccc) "Thermal exchange" means the use of water for climate control in a nondomestic building and in a manner that is essentially nonconsumptive to the source of supply.

(dddd) "Totalizer" means the mechanical or electronic portion of the register that displays the total quantity of water that has passed the water flowmeter sensor.

(eeee) "Unconfined Dakota aquifer system" means that portion of the Dakota aquifer system not overlain by Graneros shale.

(ffff) "Unconsolidated regional aquifer" means a body of mostly unconsolidated and heterogeneous water-bearing deposits that are hydraulically and geologically contiguous, and are capable of yielding water in sufficient quantities for beneficial use.

(gggg) "Waste of water" means any act or omission that causes any of the following:

- (1) The diversion or withdrawal of water from a source of supply that is not used or reapplied to a beneficial use on or in connection with the place of use authorized by a vested right, an appropriation right, or an approval of application for a permit to appropriate water for beneficial use;
- (2) the unreasonable deterioration of the quality of water in any source of supply, thereby causing impairment of a person's right to the use of water;
- (3) the escaping and draining of water intended for irrigation use from the authorized place of use; or
- (4) the application of water to an authorized beneficial use in excess of the needs for this use.

(hhhh) "Waterpower use" means the use of falling water for hydroelectric or hydromechanical power.

(iiii) "Water balance" means the method of determining the amount of water in storage in a basin storage area by accounting for inflow to, outflow from, and changes in storage in that basin storage area.

(jjjj) "Water flowmeter" means the combination of a flow-sensing device, measuring chamber, integral or remote display device or register, and any connecting parts required to make a working assemblage to measure, record, and allow determination of flow rate and total quantity of water flowing past the water flowmeter sensor.

(kkkk) "Water storage device" means a reservoir, elevated water tank, pressurized water tank, including a bladder tank, or other container into which water is pumped and stored before beneficial use.

(llll) "Water use correspondent" means a person designated in writing, on a form prescribed by the chief engineer, by one of the owners of a water right to file the water use reports required by K.S.A. 82a-732 and amendments thereto, on behalf of the owner or owners of that water right. (Authorized by and implementing K.S.A. 82a-706a; modified, L. 1978, ch 460, May 1, 1978; amended May 1, 1980; amended May 1, 1981; amended May 1, 1983; amended May 1, 1986; amended Dec. 3, 1990; amended May 31, 1994; amended Sept. 22, 2000; amended Oct. 24, 2003.)

K.A.R. 5-1-2. Standby well. In order for a well to qualify as a standby well:

(a) The well shall be maintained in operable condition and be capable of being hooked to a power source within a reasonable amount of time to allow the well to function effectively as a standby well.

(b) Both the primary well or wells and the standby well or wells shall be required to be metered by order of the chief engineer or as a condition of the water right or permit.

(c) The standby well shall be located close enough to the primary well so that both wells withdraw water from the same local source of supply.

(d) The standby well shall be authorized to divert the same rate and quantity as the primary well or wells. A limitation clause shall be placed on any water right or permit authorizing a standby well or wells limiting the standby well to no more than the rate and quantity authorized for the primary well or wells. With the limitation clause or clauses in effect, the standby well or wells shall not be counted in any safe yield, allowable appropriation, depletion or similar type of analysis. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706; effective May 31, 1994.)

K.A.R. 5-1-3. Permitting requirements of the Kansas water appropriation act. An individual engaged in the drilling of water well test holes, seismic test holes, stratigraphic test holes, observation wells, and water quality sampling wells, shall not be required to have an approval of application pursuant to the Kansas water appropriation act if water will not be diverted for beneficial use. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-701(f), 82a-703, 82a-705, and K.S.A. 1999 Supp. 82a-711; effective Sept. 22, 2000.)

K.A.R. 5-1-4. Water flowmeter specifications. Each water flowmeter required by the chief engineer, or required pursuant to a regulation adopted by the chief engineer, on or after the effective date of this regulation shall meet the following minimum requirements:

(a)(1) The water flowmeter has been certified by the manufacturer to register neither less than 98 percent nor more than 102 percent of the actual volume of water passing the water flowmeter

when installed according to the manufacturer's instructions. This requirement shall be met throughout the water flowmeter's normal operating range without further adjustment or calibration.

(2) The manufacturer has certified to the chief engineer that it has an effective quality assurance program, including wet testing a random sample of production line water flowmeters with water flowmeter test equipment. The minimum number of samples to be tested shall be determined using a confidence interval of 90 percent, an expected compliance of 95 percent, and an acceptable error of two percent. The minimum number of samples of each model that shall be tested shall be calculated by multiplying 1,300 times the annual production of that model of water flowmeter divided by Q. Q equals four times the annual production of that water flowmeter plus 1,300.

(3) The manufacturer has certified that the water flowmeter test equipment described in paragraph (a)(2) has been tested annually and found accurate by standards traceable to the national institute of standards and technology (NIST). Documentation of the testing required in paragraphs (a)(1) and (2) shall be maintained by the manufacturer for a period of at least five years and shall be made available to the chief engineer upon request during normal business hours.

(b) The water flowmeter shall be designed and constructed so that it will meet the following criteria

(1) Maintain the accuracy required by the chief engineer in K.A.R. 5-1-4(a) and K.A.R. 5-1-9(a);

(2) be protected by the following:

(A) A seal installed by the manufacturer or an authorized representative of the manufacturer; or

(B) a way that makes it impossible to alter the totalizer reading without breaking the seal or obtaining the authorization of the manufacturer, an authorized representative of the manufacturer, or the chief engineer;

(3) clearly indicate the direction of water flow;

(4) clearly indicate the serial number of the water flowmeter;

(5) have a weatherproof register that is sealed from all water sources;

(6) have a register that is readable at all times, whether the system is operating or not;

(7) be able to be sealed by an authorized representative of the chief engineer to prevent unauthorized manipulation of, tampering with, or removal of the water flowmeter;

(8) be equipped with a manufacturer-approved measuring chamber through which all water flows. Except for positive displacement water flowmeters, full-bore electromagnetic water flowmeters, and multijet water flowmeters, flow-straightening vanes shall be installed at the upstream throat of the water flowmeter chamber. The flow-straightening vanes shall meet either of the following criteria:

(A) Be designed and installed by the manufacturer, or an authorized representative of the manufacturer; or

(B) consist of at least three vanes that meet the following conditions:

(i) Are longer, when placed parallel to the length of the pipe, than the inside diameter of the pipe;

(ii) are equally spaced radially on the inner periphery of the pipe; and

(iii) are wider in diametrical distance than one-fourth of the inside diameter of the pipe;

(9) be equipped with an inspection port if the straightening vanes are not designed, constructed, and installed by the manufacturer or an authorized representative of the manufacturer. The port shall be of sufficient size and placement to allow determination of the following:

- (A) The proper installation of the flow-straightening vanes; and
- (B) the inside diameter of the pipe in which the water flowmeter sensor is installed;
- (10) remain operable without need for recalibration to maintain accuracy throughout the operating life of the water flowmeter; and
- (11) have a totalizer that meets the following criteria:
 - (A) Is continuously updated to read directly only in acre-feet, acre-inches, or gallons;
 - (B) has sufficient capacity, without cycling past zero more than once each year, to record the quantity of water diverted in any one calendar year;
 - (C) reads in units small enough to discriminate the annual water use to within the nearest 0.1 percent of the total annual permitted quantity of water;
 - (D) has a dial or counter that can be timed with a stopwatch over not more than a 10-minute period to accurately determine the rate of flow under normal operating conditions; and
 - (E) has a nonvolatile memory.

(c) Each water flowmeter that is required to be installed by the chief engineer, or that was required to be installed as a condition of either an approval of application or an order of the chief engineer, or pursuant to a regulation adopted by the chief engineer before the effective date of this regulation, shall meet the following minimum specifications:

(1) Each water flowmeter shall be of the proper size, pressure rating, and style, and shall have a normal operating range sufficient to accurately measure the water flow passing the water flowmeter under normal operating conditions.

(2) Each water flowmeter shall meet the accuracy requirements of K.A.R. 5-1-9(a). If the water flowmeter does not meet the accuracy requirements of K.A.R. 5-1-9(a), then the water flowmeter shall meet either of the following criteria:

- (A) Be repaired so that it can meet the accuracy requirements of K.A.R. 5-1-9(a); or
- (B) be replaced with a water flowmeter complying with all of the requirements of K.A.R. 5-1-4 and installed in a manner that meets the requirements of K.A.R. 5-1-6. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 82a-706c; effective Sept. 22, 2000; amended Oct. 24, 2003.)

K.A.R. 5-1-5. Variances from water flowmeter specifications. (a) A variance from the chief engineer's water flowmeter specifications may be granted by the chief engineer if the water right owner furnishes detailed specifications of a proposed water flowmeter and demonstrates to the chief engineer all the following:

(1) A water flowmeter meeting the specifications of K.A.R. 5-1-4 will not satisfactorily serve the water user's needs.

(2) The proposed water flowmeter will meet the accuracy requirements of K.A.R. 5-1-4(a) and (b).

(3) The proposed water flowmeter will provide a reliable and accurate water use record for that point of diversion.

(b) Variances shall be granted only on a site-by-site, case-by-case basis. No general variances shall be granted for any brand or model of water flowmeter, except as set forth in subsection (c).

(c) A limited variance shall be granted by the chief engineer for a period of up to three years to allow that specific brand and model of a water flowmeter to be tested in the field and to serve as a water flowmeter required by the chief engineer if all of the following conditions are met:

(1) The manufacturer demonstrates to the chief engineer that a particular model and brand of water flowmeter utilizes new technology, does not meet one or more of the requirements of K.A.R. 5-1-4, and is likely to be as reliable, or more reliable, than water flowmeters currently meeting all of the requirements of K.A.R. 5-1-4.

(2) The manufacturer agrees to install not more than 50, nor less than 10, water flowmeters to test the new technology.

(3) The manufacturer agrees to collect data for at least one year that is sufficient to allow the chief engineer to determine whether that brand and model of water flowmeter meets the reliability and accuracy specifications of K.A.R. 5-1-4. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706c; effective Sept. 22, 2000.)

K.A.R. 5-1-6. Water flowmeter installation specifications. (a) Each water flowmeter required by the chief engineer to be installed or required pursuant to a regulation adopted by the chief engineer, on or after the effective date of these regulations shall meet the following minimum water flowmeter installation specifications:

(1) Each water flowmeter shall be installed in a manner that meets the following criteria:

(A) Meets or exceeds the instructions of the manufacturer; and

(B) except for a multijet and a positive displacement water flowmeter, is installed so that there are at least five pipe diameters of straight pipe upstream and at least two pipe diameters of straight pipe downstream of the sensor portion of the water flowmeter, regardless of the manufacturer's installation specifications.

(2) Each water flowmeter shall be sized and installed so that full pipe flow will be maintained through the water flowmeter and so that water velocity in the measuring chamber will be within the normal operating range of the water flowmeter at all times while water is being diverted.

(3) If a water flowmeter is located downstream of a water storage device, there shall be at least seven diameters of straight pipe upstream of the water storage device where a water flowmeter may be installed for a field test by the chief engineer.

(4) Each water flowmeter shall be installed at a location at which the flowmeter measures all water diverted from the source of supply and does not measure water or other discharge, including tailwater and sewage effluent.

(b) Each water flowmeter that is required by the chief engineer to be installed, or that was required to be installed as a condition of either an approval of application or an order of the chief engineer, or pursuant to a regulation adopted by the chief engineer, before the effective date of these regulations, shall meet the following minimum installation specifications:

(1) Each water flowmeter shall be installed in a manner that meets or exceeds the instructions of the manufacturer and, except for a multijet and a positive displacement water flowmeter, shall be installed so that there are at least five pipe diameters of straight pipe upstream and at least two pipe diameters of straight pipe downstream of the sensor portion of the water flowmeter, regardless of the manufacturer's installation specifications.

(2) Each water flowmeter shall be sized and installed so that full pipe flow will be maintained through the water flowmeter and so that water velocity in the measuring chamber will be within the normal operating range of the water flowmeter at all times while the water is being diverted.

(3) Each water flowmeter shall be installed at a location at which the flowmeter measures all water diverted from the source of supply and does not measure water or other discharge, including tailwater and sewage effluent. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 82a-706c; effective Sept. 22, 2000; amended Oct. 24, 2003.)

K.A.R. 5-1-7. Requirement to install a water flowmeter or other suitable water-measuring device. (a) All nondomestic, nontemporary wells and pump sites operated under the authority of an approval of application issued on or after the effective date of this regulation shall be equipped with a water flowmeter that meets or exceeds the specifications of the chief engineer effective at the time the application is approved by the chief engineer.

(b)(1) All nondomestic, nontemporary gravity diversions of water, including irrigation ditches, operating under the authority of an approval of application issued on or after the effective date of this regulation shall be equipped with a continuous recording gauge, or other suitable water-measuring device located at or near the headgate. Before installation, the water right owner shall submit plans and specifications for the proposed gauge, or other suitable water-measuring device, to the chief engineer and shall receive approval in writing from the chief engineer before installing the gauge or other suitable water-measuring device.

(2) The gauge or other suitable water-measuring device shall meet the following criteria:

(A) Register not less than 94% and not more than 106% of the actual volume of water passing the device under normal operating conditions when compared to a field test made by, or approved by, the chief engineer;

(B) be installed in accordance with the installation requirements of the chief engineer; and

(C) be maintained in a satisfactory operating condition any time water can reasonably be expected to be diverted.

(c) An approval of a nondomestic application for change in place of use, the point of diversion, or the use made of the water, or any combination of these, shall require the owner of the well or pump site to install a water flowmeter on all points of diversion authorized by the water right or approval of application, unless any of the following conditions is met:

(1) The applicant demonstrates to the chief engineer that the application to change the place of use meets the requirements of K.A.R. 5-5-11(e).

(2) The applicant demonstrates to the chief engineer both of the following:

(A) Installation of a water flowmeter meeting these specifications is not physically feasible.

(B) The applicant agrees to implement a reasonable, objective alternative of measuring the quantity of water diverted that is acceptable to the chief engineer.

(3) The water is being diverted from multiple points of diversion authorized by one water right that does not limit the maximum annual quantity and maximum rate of diversion by point of diversion, and all of the water flows to a common point where a water flowmeter meeting the requirements of K.A.R. 5-1-4 and K.A.R. 5-1-6 measures all of the water pumped from all of the points of diversion authorized by that water right.

(4) An application for change in point of diversion only is filed to change the point of diversion of only one well, when more than one well is authorized by the approval of application or water right that authorizes the well for which a change in point of diversion is sought. In this case, only the well that is being relocated shall be required to have a water flowmeter.

(d) Except as set forth in subsection (c), if an approval of an application for change requires the installation of a water flowmeter, the requirement to install a water flowmeter shall also be placed on all other water rights and approvals authorizing diversion of water from the same point of diversion.

(e) If any water right or approval of application has a condition requiring development, adoption, and implementation of a water conservation plan pursuant to K.S.A. 82a-733 and amendments thereto, a water flowmeter or suitable water-measuring device shall be installed on each authorized point of diversion in compliance with these regulations.

(f) The owner of a water right, including a domestic water right, or an approval of application shall also be required by the chief engineer to install a water flowmeter or other suitable water-measurement device that complies with these regulations on each authorized point of diversion if it is necessary for the chief engineer to effectively administer water rights to prevent impairment, to protect minimum desirable stream flows, to conserve water, or to otherwise carry out the duties of the chief engineer as set forth in the Kansas water appropriation act, K.S.A. 82a-701 et seq., and amendments thereto.

(g) Except as set forth in subsection (c), if a water flowmeter is required by the chief engineer, each point of diversion authorized by the approval of application or water right shall be required to have a separate meter. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706c; effective Sept. 22, 2000.)

K.A.R. 5-1-8. Water flowmeter maintenance. If a water right owner is required by the chief engineer to install a water flowmeter, the water right owner shall maintain the water flowmeter in compliance, as defined by K.A.R. 5-1-1, whenever diversion of water can reasonably be expected to occur. If at any time the required water flowmeter fails to function properly, the owner shall promptly initiate action to repair or replace the meter, or to correct any problems with the installation. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706c; effective Sept. 22, 2000.)

K.A.R. 5-1-9. Criteria to determine when a water flowmeter is out of compliance. A water flowmeter shall be considered to be out of compliance if any of the following criteria is met:

(a) The water flowmeter registers less than 94 percent or more than 106 percent of the actual volume of water passing the water flowmeter. If necessary, this determination may be made by a field test conducted by, or approved by, the chief engineer.

(b) The seal placed on the totalizer by the manufacturer or the manufacturer's authorized representative has been broken, or the totalizer value has been reset or altered without the authorization of the manufacturer, an authorized representative of the manufacturer, or the chief engineer.

(c) A seal placed on the water flowmeter or totalizer by the chief engineer has been broken.

(d) The water flowmeter register is not clearly visible or is unreadable for any reason.

(e) There is not full pipe flow through the water flowmeter.

(f) Flow-straightening vanes have not been properly designed, manufactured, and installed.

(g) The water flowmeter is not calibrated for the nominal size of the pipe in which it is installed.

(h) The water flowmeter is not installed in accordance with the manufacturer's installation specifications. However, five diameters of straight pipe above the water flowmeter sensor and two diameters below the water flowmeter sensor shall be the minimum spacing, regardless of the manufacturer's installation specifications.

(i) A water flowmeter is installed at a location at which the flowmeter does not measure all of the water diverted from the source of supply. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 82a-706c; effective Sept. 22, 2000; amended Oct. 24, 2003.)

K.A.R. 5-1-10. Duties of water right owner when a water flowmeter is out of compliance. (a) A water right owner, or the water right owner's authorized designee, shall promptly notify the chief engineer if any water flowmeter required by the chief engineer is out of compliance.

(b) Within 30 days after the date on which the out-of-compliance water flowmeter has been repaired or replaced, the water right owner or the water right owner's authorized designee shall notify the chief engineer in writing of the following information:

(1) The date the water flowmeter became out of compliance;

- (2) the water flowmeter reading at the time the water flowmeter became out of compliance;
- (3) if the water flowmeter was replaced, the following information:
 - (A) The brand, model, size, and serial number of the new water flowmeter;
 - (B) the units in which the new water flowmeter reads;
 - (C) the reading of the new water flowmeter at the time of installation; and
 - (D) the location of the new water flowmeter on the diversion works or delivery system;
- (4) if the water flowmeter was repaired, the water flowmeter reading immediately before the repair and the reading of the water flowmeter at the time it was reinstalled or the repair was completed on site;
- (5) the date the repair or replacement was completed; and
- (6) the amount of water diverted while the water flowmeter was out of compliance.

(c) If the water right owner does not maintain a record of diversions of water that is sufficient to reasonably estimate the quantity of water diverted while the water flowmeter was out of compliance, it shall be assumed, for the sole purposes of enforcement of the terms, conditions, and limitations of the approval of application or water right, and priority administration of water rights among water users, that the diversion works were operated continuously at the tested rate of diversion during the entire period the water flowmeter was out of compliance. If the rate of diversion has not been tested by the chief engineer, then it shall be assumed that the diversion works were operated continuously at the authorized rate of diversion during the entire time the water flowmeter was out of compliance. The assumption set forth in this subsection shall not apply to the determination of the annual quantity of water diverted for the purpose of perfecting a water right.

(d) If the water right owner is required by the chief engineer to repair or replace an inoperable water flowmeter, it shall be the duty of the water right owner to ensure that the repaired or replaced water flowmeter is in compliance with K.A.R. 5-1-4 and K.A.R. 5-1-6. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706c; effective Sept. 22, 2000.)

K.A.R. 5-1-11. Water flowmeter testing by a nonagency person. If a water right owner desires to have a water flowmeter flow rate test done by a nonagency person for any reason, a person may be approved by the chief engineer to perform a water flowmeter flow rate test if the person demonstrates to the chief engineer both of the following:

- (a) The person has the training, skills, and experience necessary to properly conduct the test.
- (b) The person has the appropriate water flowmeter to do the test, and the water flowmeter has been tested for accuracy with water flowmeter test equipment that has been found to be accurate using standards traceable to the national institute of standards and technology (NIST). The equipment shall have been tested and found to be accurate within 12 months of performing the water flowmeter test. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706c; effective Sept. 22, 2000.)

K.A.R. 5-1-12. List of water flowmeters certified by the manufacturer to meet the specifications of the chief engineer. (a) A list of all makes and models of water flowmeters that have been certified by the water flowmeter manufacturer to meet the specifications of the chief engineer shall be maintained by the chief engineer. This list shall be made available by the chief engineer to the public upon request.

(b) A water flowmeter shall be placed on the list only if the manufacturer has submitted to the chief engineer all of the following information for each water flowmeter model:

(1) The water flowmeter manufacturer's name, address, contact person's name, and telephone number;

(2) the water flowmeter model name or number;

(3) proof that a random sample of water flowmeters of each model has been tested in accordance with the requirements of K.A.R. 5-1-4(a);

(4) the last date that the water flowmeter test equipment was tested and found to be accurate by standards traceable to the national institute of standards and technology (NIST);

(5) verification that the water flowmeter is designed and constructed so that accuracy will be maintained over the life of the water flowmeter;

(6) verification that the water flowmeter serial number and direction of flow are clearly indicated on the water flowmeter;

(7) verification that the register is weatherproof and sealed from all water sources;

(8) verification that the totalizer will read only in acre-feet, acre-inches, or gallons;

(9) the number of active digits in the totalizer;

(10) verification that the memory is nonvolatile;

(11) verification that the totalizer cannot be reset without breaking the manufacturer's seal or obtaining the authorization of the manufacturer, an authorized representative of the manufacturer, or the chief engineer;

(12) verification that the water flowmeter and register are constructed in such a manner that they can be sealed by the chief engineer;

(13) a description of the measuring chamber provided for each water flowmeter model;

(14) specifications of the flow-straightening vanes installed in the measuring chamber;

(15) the spacing recommendations for each water flowmeter model in terms of pipe diameters of straight pipe required upstream and downstream of the water flowmeter sensor; and

(16) the normal operating range of the water flowmeter.

(c) A brand or model of a water flowmeter shall be removed from the list of water flowmeters specified in subsection (a) of this regulation if it has been demonstrated to the chief engineer that the brand or model of water flowmeter does not reliably and consistently meet the accuracy standards of K.A.R. 5-1-9(a). (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 82a-706c; effective Sept. 22, 2000; amended Oct. 24, 2003.)

K.A.R. 5-2-1 and 5-2-2. Not in active use. Proposed regulations 5-2-1 and 5-2-2 were rejected by the legislature, see L. 1978, ch. 460.

K.A.R. 5-2-3. Battery of wells. Except as set forth in subsection (c), if a permit to appropriate water did not authorize a battery of wells, as defined in K.A.R. 5-1-1, before the effective date of this regulation, an application for change filed pursuant to K.S.A. 82a-708b, and amendments thereto, to add one or more wells to the authorized well to create a battery of wells shall not be approved unless all of the following criteria in either subsection (a) or (b) are met at the time that the application for change is filed:

- (a)(1) The time to construct the diversion works has not expired.
- (2) The proposed battery will meet the definition of a battery of wells as defined in K.A.R. 5-1-1.

- (b)(1) The time to construct the diversion works has expired.
- (2) A new application to appropriate water filed to appropriate water at the geocenter of the proposed battery of wells would meet the safe yield, allowable appropriation, or similar type of regulation, for a well filed at that location.
- (3) The proposed battery of wells meets the definition of a battery of wells as defined in K.A.R. 5-1-1.

(c) Subsections (a) and (b) shall not apply to an application to change the point of diversion filed to add one or more wells to the authorized well to create a battery of wells if the proposed battery of wells is located within the boundary of a groundwater management district for which the chief engineer has adopted a specific regulation applicable to batteries of wells within that district. (Authorized by and implementing K.S.A. 82a-706a; effective Sept. 22, 2000.)

K.A.R. 5-3-1. Application acceptable for filing. (a) To be acceptable for filing, an application for an approval of application shall be accompanied by the statutorily required filing fee, except for an application for domestic use, and shall contain all of the following:

- (1) The name and mailing address of each applicant;
- (2) the signature of each applicant or each authorized representative;
- (3) the proposed source of water supply;
- (4) the proposed authorized place of use; and
- (5) either a description of the location of the proposed point of diversion or a request for a 60-day period of time in which to establish the proposed point of diversion within a specifically described, nominal legal quarter section of land.

(b) When an application is received in the office of the chief engineer and assigned a number, the maximum quantity of water per calendar year and the maximum rate of diversion shall not be increased. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 82a-709; modified, L. 1978, ch. 460, May 1, 1978; amended May 1, 1980; amended Oct. 24, 2003.)

K.A.R. 5-3-1a. Application for a basin term permit. An application for a basin term permit shall be filed on a form prescribed by the chief engineer. The term requested shall not exceed

one year. A basin term permit may be extended in one-year increments if all of the following conditions are met:

- (a) The request for extension is filed before the end of the current term in a manner acceptable to the chief engineer.
- (b) The applicant has complied with the terms, conditions, and limitations of the basin term permit during the previous calendar year.
- (c) Granting the requested extension will not cause impairment of each approval of application and water right with an earlier priority.
- (d) The applicant shows good cause why the extension should be granted.

The total time authorized by a basin term permit shall not exceed five calendar years. Basin term permits shall not be transferable. At the end of the specified term, the permit shall be dismissed, and any priority it may have had shall be forfeited. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-712; effective Sept. 22, 2000.)

K.A.R. 5-3-1b. Complete new application. (a) A new application to appropriate water for beneficial use shall be considered to be a “complete application” for the purposes of K.S.A. 82a-708a, and amendments thereto, if the application completely and accurately meets all the requirements specified in this regulation and the following criteria:

- (1) The requirements specified in K.S.A. 82a-708a, and amendments thereto;
- (2) the requirements specified in K.S.A. 82a-709, and amendments thereto;
- (3) the requirements specified in K.S.A. 82a-710, and amendments thereto;
- (4) any water conservation plans required by the chief engineer pursuant to K.S.A. 82a-733, and amendments thereto;
- (5) the requirements of K.S.A. 82a-301 through K.S.A. 82a-305a, and amendments thereto, if the proposed point of diversion, or redirection, is a dam or stream obstruction;
- (6) the requirements specified in K.A.R. 5-3-1;
- (7) the requirements specified in K.A.R. 5-3-4; and
- (8) the requirements specified in K.A.R. 5-3-4d.

(b) If minimum desirable streamflow (MDS) requirements have been set for the proposed source of water supply, the application shall contain a statement signed by the applicant acknowledging that the MDS requirements apply to the proposed source of water supply and that the diversions of water authorized by this approval of application could be regulated at times to protect MDS.

(c) If the applicant is requesting a waiver or exemption of a regulation pursuant to K.S.A. 82a-1904, and amendments thereto, the applicant shall submit a written request for the waiver or exemption, and documentation to support the waiver or exemption.

(d) If the proposed point of diversion is located within the boundaries of a groundwater management district, a final recommendation or analysis of the availability of water has been received from the groundwater management district within the time limit set by the chief engineer concerning the approval, denial, or modification of the application.

(e) If a substantive question has been raised concerning whether approval of the application could cause impairment of senior water rights or prejudicially and unreasonably affect the public interest, the applicant shall submit sufficient information to resolve that question.

(f) If any actions are required to be taken by the applicant on other approvals of applications or water rights owned by the applicant in order to make the new application approvable, including dismissals, reductions in water rights in accordance with K.A.R. 5-7-5, and applications for change, all necessary forms shall be completed and filed with the chief engineer.

(g) The applicant shall submit all information and data necessary to demonstrate that the application complies with the applicable regulations adopted by the chief engineer. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a K.S.A. 2002 Supp. 82a-708a, K.S.A. 82a-709, K.S.A. 82a-710, K.S.A. 2002 Supp. 82a-711, K.S.A. 82a-733, and K.S.A. 2002 Supp. 82a-1904; effective Oct. 24, 2003.)

K.A.R. 5-3-2. Priorities. (a) Upon receipt in the office of the chief engineer of an acceptable application for permit to appropriate water for beneficial use, accompanied by the statutory application fee, a stamp showing the date and time of receipt shall be placed on the application form. The date and time of receipt of the application for any use, other than domestic, shall establish the priority of whatever appropriation right that may be subsequently perfected pursuant to the application;

(b) The date and time of the receipt of an application for permit to appropriate water for domestic use or the date of the first use of water for such purpose, whichever is earlier, shall establish the priority of the appropriation right for domestic use. When the first use of water is earlier in time than the filing date of an application, the applicant shall furnish affidavits from disinterested parties to substantiate the date that water was first used from the appropriate water supply for domestic purposes. (Authorized by K.S.A. 82a-706a; modified, L. 1978, ch. 460, May 1, 1978.)

K.A.R. 5-3-3. Storage of water for domestic use. Any person entitled to use water for beneficial purposes may collect and store the same so long as such collection, storage, use and times of use thereafter are consistent with reasonable storage and conservation practices. A reasonable quantity of water stored for domestic use shall be considered to be that quantity sufficient to satisfy the domestic use for the current year and two succeeding years. (Authorized by K.S.A. 82a-706a; modified, L. 1978, ch. 460, May 1, 1978.)

K.A.R. 5-3-3a. Legal access. If the chief engineer is aware, or becomes aware, that the applicant does not have legal access to either the point of diversion or the place of use, before an

application for any of the following can be approved by the chief engineer, the applicant shall demonstrate that the applicant has legal access to the proposed point of diversion and the proposed place of use before the approval of the application:

- (a) An approval of application;
- (b) a change in place of use;
- (c) a change in point of diversion; or
- (d) any combination of subsections (a), (b), and (c). (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-708a; effective Oct. 24, 2003.)

K.A.R. 5-3-4. Application contents. (a) Each application for permit to appropriate water for beneficial use shall contain all the information requested for the proposed uses as set forth in the prescribed application form and such other information as may be required for a proper understanding of the proposed appropriation.

(b) Each application shall be accompanied by an aerial photograph or a detailed plat preferably to a scale of one (1) inch equals one thousand three hundred and twenty (1,320) feet, or a U. S. geological survey topographic map, scale 1:24,000. Information that shall be plotted on the plat, photograph, or topographic map is as follows:

- (1) The section corners.
- (2) The center of the section, identified by the section number, township and range.
- (3) The location of the point of diversion – well location, stream bank pump site, dam location or location of other works for diversion of water – indicated by an appropriate symbol.
- (4) The location of the place of use identified by crosshatching or by some other appropriate method.
- (5) The location of all other water wells of every kind within one-half (1/2) mile of the well(s) covered by the proposed appropriation, each of which shall be identified as to its use and the name and mailing address of the owner, if the proposed appropriation is for use of groundwater.
- (6) The name and mailing address of the owner(s) of each tract of land adjacent to the stream for a distance of one-half (1/2) mile upstream and one-half (1/2) mile downstream from the property lines of the land owned or controlled by the applicant, if the proposed appropriation is for the use of surface water.
- (7) The locations of proposed or existing dams, dikes, reservoirs, canals, pipelines, power houses and other structures for the purpose of storing, conveying or using water.
- (8) A north arrow and scale.

The information shown on the photograph or plat shall be legible. Black line prints may be submitted in lieu of the original drawing if a plat is submitted.

- (c) Separate applications shall be filed for surface water and groundwater.

(d) If the source of supply is groundwater, a separate application shall be filed for each proposed well or battery of wells, except that up to four (4) wells within a circle with a quarter (1/4) mile radius in the same local source of supply which do not exceed a maximum diversion rate of twenty (20) gallons per minute per well and which are operated by means of submersible pumps may be included in a single application. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-709; modified, L. 1978, ch. 460, May 1, 1978; amended May 1, 1980; amended May 1, 1981.)

K.A.R. 5-3-4a. Hearing prior to approval of application. A hearing may be held before the chief engineer, or a person designated by the chief engineer, on an application to appropriate water for beneficial use prior to approval, when the chief engineer finds it to be in the public interest to hold a hearing, or a hearing has been requested by a person who shows to the satisfaction of the chief engineer that approval of the application may cause impairment of senior water rights or permits. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-711; effective May 1, 1980; amended May 31, 1994.)

K.A.R. 5-3-4b. Deadlines for return of documents. (a) If the chief engineer allows a person a specific number of days to return or submit a document or other information, the time period shall be computed as prescribed in K.S.A. 60-206(a) and (e), and amendments thereto.

(b) If a person is given until a specific date to return or submit a document or other information, the document or information shall be deemed to be timely filed if it is received in the office of the chief engineer no later than the third working day following the specified date. Working days shall be all days except Saturdays, Sundays, and legal holidays designated by the United States congress, the Kansas legislature, or the governor of Kansas. Half holidays shall be counted as working days.

(c) Any document that is postmarked by the United States postal service with a legible date on or before the deadline set by the division for returning the document shall be accepted by the division as being timely filed, regardless of when it is received. In the case of United States registered mail, the date of registration shall be deemed to be the postmark date. The term "United States postal service," as used in this subsection, shall include a private delivery service available to the general public that routinely records, in the regular course of business, the date the item is given to the service for delivery. The date the item is given to the service for delivery shall be deemed to be the postmark date. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-710; effective May 1, 1980; amended Sept. 22, 2000.)

K.A.R. 5-3-4c. Retaining new applications. (a) A new application to appropriate water for beneficial use shall be held by the chief engineer in accordance with the terms of subsection (b) if the application meets both of the following conditions:

(1) The application is in proper form and has been completely processed, but cannot be approved because it does not currently comply with one or more statutory or regulatory requirements, including spacing, safe yield, and allowable appropriation regulations.

(2) There is good cause to believe that, if the application were held for a reasonable period of time, it may be approvable in the future because of actions currently pending on other permits and water rights in the area, including issuance of certificates, dismissals of applications, and declarations of abandonment.

(b) Upon demonstration by the applicant to the chief engineer that the application apparently could be approved within a reasonable time, not to exceed 365 days from the date the request to retain the application was received by the chief engineer, if the pending actions take place, the applicant's pending new application may be held by the chief engineer for a period not to exceed 365 days.

(c) If the application still cannot be approved at the end of the time set forth in section (b), the application shall be dismissed by the chief engineer and the priority of the application forfeited.

(d) If any prior applications to appropriate water or prior applications to change the point of diversion from the same source of supply are not complete and if the approval or denial of these applications could affect the approval of the proposed new application or application to change a water right, then the 150-day period specified in K.S.A. 82a-708a, and amendments thereto, shall begin to run only after all these prior applications have been processed. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-705, K.S.A. 82a-706a, K.S.A. 2002 Supp. 82a-708a, and K.S.A. 82a-710; effective Sept. 22, 2000; amended Oct. 24, 2003.)

K.A.R. 5-3-4d. Stratigraphic log requirements. (a) Except as set forth in subsection (b), each applicant who files either of the following applications shall submit to the chief engineer a stratigraphic log for a test hole located within 300 feet of the proposed new or replacement well:

(1) A new application to appropriate groundwater, except for domestic use, a temporary permit, or a term permit for fewer than five years; or

(2) an application to change the point of diversion to relocate a well.

This stratigraphic log shall contain geologic and any other information sufficient to allow the chief engineer to understand the lithology and to classify the groundwater source formation or formations from which the proposed well will be withdrawing water.

(b)(1) If an application is filed for a new well, the stratigraphic log shall not be required if the chief engineer has sufficient information to understand the lithology and determine the groundwater source formation or formations from which the proposed well will be withdrawing water.

(2) If an application is filed for a change in point of diversion, the stratigraphic log shall not be required if the chief engineer has sufficient information to understand the lithology and determine the groundwater source formation or formations from which the original well withdrew water and the replacement well will withdraw water.

(c) Each applicant to construct a new well or to change the point of diversion to a newly constructed well who submitted a stratigraphic log to the chief engineer pursuant to subsection (a) above shall not be required to submit to the chief engineer a copy of the stratigraphic log of the completed well as required by the Kansas department of health and environment under the authority of K.S.A. 82a-1212 and amendments thereto. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a, K.S.A. 82a-709, and K.S.A. 82a-710; effective Sept. 22, 2000; amended Oct. 24, 2003.)

K.A.R. 5-3-4e. Groundwater source formation. The Kansas department of agriculture, division of water resources' document titled "groundwater source formation codes," dated November 3, 1999, is hereby adopted by reference for the sole purpose of determining the groundwater source formation codes used by the chief engineer in administering the provisions of the Kansas water appropriation act. The groundwater source formation codes used by the chief engineer shall be the codes set forth in the document described above. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-709; effective Sept. 22, 2000.) **(See insert, pgs 27 - 29.)**

K.A.R. 5-3-5. Approval of application. The approval of an application on the prescribed form shall constitute a permit to proceed with the construction of authorized diversion works and the diversion and use of water.

The applicant shall be notified of the approval of the application by transmitting to him or her the original document setting forth the terms, conditions, and limitations of the permit which has been duly dated and signed by the chief engineer or his or her authorized representative. A copy of the approval of application and permit to proceed shall be maintained in the office of the chief engineer or the appropriate field office. (Authorized by K.S.A. 82a-706a; modified, L. 1978, ch. 460, May 1, 1978.)

K.A.R. 5-3-5a. Authorization for the use of water for emergency purposes. The chief engineer, or a person designated by the chief engineer, may authorize the use of water for emergency purposes. The emergency approval shall be subject to the terms, conditions and limitations specified by the chief engineer and may be granted when determined to be in the public interest or when needed to protect the quality of a water supply, to provide fire protection, or to provide an alternate point of diversion or source of supply when the principal source of supply or point of diversion is unavailable due to conditions beyond the control of the applicant. (Authorized by K.S.A. 82a-706a, 82a-711; effective May 1, 1980.)

K.A.R. 5-3-5b. Approval of application for water for the development of underground storage in mineralized formations. In any case where it is not technologically and economically feasible to utilize poorer quality water for the development of underground storage in mineralized formations and fresh water must be used, the chief engineer shall require the construction of surface brine storage facilities to the extent economically and technologically feasible in an amount not to exceed forty percent (40%) of underground storage capacity of the applicant. This regulation does not exempt a person from complying with the requirements of other state and federal agencies relative

to the construction of surface brine storage facilities. (Authorized by K.S.A. 82a-706a, 82a-707(d); effective May 1, 1980.)

K.A.R. 5-3-5c. Check valves. (a) All diversion works not subject to regulation under the Kansas chemigation safety law, K.S.A. 2-3301 et seq. and amendments thereto, into which any type of chemical or other foreign substances will be injected into the water pumped from the diversion works shall be equipped with an in-line, automatic, quick-closing check valve capable of preventing pollution of the source of the water supply.

(b) Each check valve required by the chief engineer shall be constructed and installed in accordance with the requirements specified in K.A.R. 5-6-13a.

(c) Each check valve and all required components shall be maintained in an operating condition that prevents backflow into the source of water supply whenever a foreign substance could reasonably be expected to be introduced into the water system. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706, K.S.A. 82a-706a, K.S.A. 82a-712; effective May 1, 1980; amended May 1, 1981; amended Oct. 24, 2003.)

K.A.R. 5-3-5d. Persons required to install a water level measurement tube. Every well with an authorized maximum rate of diversion of 100 or more gallons per minute drilled after the effective date of this regulation, except those wells authorized under a temporary permit, a domestic right, or a term permit for five or fewer years, shall have a tube installed in accordance with specifications adopted by the chief engineer. This tube shall be suitable for making water level measurements and shall be maintained in a satisfactory condition. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706c; effective May 1, 1980; amended Sept. 22, 2000.)

K.A.R. 5-3-5e. Meters and other water-measuring devices; reporting readings; maintenance, and replacement. (a) For the purpose of this regulation, "meter" shall mean a water flowmeter or other water-measuring device.

(b) Whenever the installation of a meter is required by the chief engineer as a condition of a water right or permit, by written order of the chief engineer, or by requirement of a groundwater management district, the water right owner shall report all information required on the form prescribed by the chief engineer pursuant to K.S.A. 82a-732, and amendments thereto, including the following:

- (1) The beginning and ending readings of the meter each calendar year;
- (2) the units in which the meter registers; and
- (3) the quantity of water diverted during the calendar year in the same units in which the meter registers.

(c) Whenever a totalizing hour meter has been required by the chief engineer or a groundwater management district, the water right owner shall report all information required on the

form prescribed by the chief engineer pursuant to K.S.A. 82a-732, and amendments thereto, including the following:

- (1) The beginning and ending readings of the meter each calendar year;
- (2) the units in which the meter registers; and
- (3) the rate of diversion at which water is pumped in gallons per minute. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-732; effective May 31, 1994; amended Sept. 22, 2000.)

K.A.R. 5-3-5g. Designation of a water use correspondent. If the owner or owners of an approval of application or a water right desire to delegate the authority to receive and submit the annual water use reports as prescribed by K.S.A. 82a-732, and amendments thereto, to another person, an owner of the approval of application or the water right shall sign and submit a form prescribed by the chief engineer designating the person responsible to receive and submit the required annual water use report. However, the water right owner or owners shall remain, in all cases, the person or persons legally responsible for filing the water use reports required by K.S.A. 82a-732, and amendments thereto. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-732; effective Sept. 22, 2000.)

K.A.R. 5-3-5h. Water conservation plans. Each water conservation plan shall be submitted on a form prescribed by the chief engineer. The plan shall also contain the name, address, and telephone number of the designer of the water conservation plan. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-733; effective Sept. 22, 2000.)

K.A.R. 5-3-5i. Time limit to implement a water conservation plan. (a) The time to fully implement the water conservation plan shall be limited by the chief engineer to a reasonable specific date, which may be extended for good cause shown by the applicant.

(b) A municipal or industrial water user shall be given at least one full calendar year after the conservation plan is approved by the chief engineer to fully implement the water conservation plan.

(c) A user of water for irrigation shall be given at least one full growing season after the conservation plan is approved by the chief engineer to fully implement the approved water conservation plan. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-733; effective Sept. 22, 2000.)

K.A.R. 5-3-5j. Maintenance of a water conservation plan. Once implemented, the applicant shall continue to satisfactorily maintain each component of the water conservation plan. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-733; effective Sept. 22, 2000.)

K.A.R. 5-3-5k. Review of a water conservation plan. The right to review the water conservation plan to determine if it is consistent with current guidelines adopted and maintained pursuant to K.S.A. 74-2608, and amendments thereto, shall be reserved by the chief engineer. If the review determines that the water conservation plan is materially different from those guidelines, then

the owner of the water right or approval of application may be ordered by the chief engineer to amend the water conservation plan to make it consistent with the current guidelines for conservation plans and practices adopted and maintained pursuant to K.S.A. 74-2608, and amendments thereto. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-733; effective Sept. 22, 2000.)

K.A.R. 5-3-5l. Changes in a water conservation plan. If a person required to implement a water conservation plan desires to make a material change in the plan, that person shall submit a request to make the change to the chief engineer on a form prescribed by the chief engineer. Any material change in an approved water conservation plan shall require the prior written approval of the chief engineer. Any proposed change in a water conservation plan shall be subject to the same type of review as that required for the original water conservation plan. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-733; effective Sept. 22, 2000.)

K.A.R. 5-3-5m. Limited power of attorney. If all of the owners of an approval of application or water right desire to authorize any other person to take any type, or types, of official action on behalf of the approval of application or water right, all of the owners of the approval of application or water right shall meet the following requirements:

(a) A limited power of attorney shall be submitted to the chief engineer.

(b) The limited power of attorney shall be signed and acknowledged by all of the owners of the approval of application or water right and filed pursuant to the provisions of K.S.A. 58-601, and amendments thereto. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 82a-701 et seq.; effective Sept. 22, 2000.)

K.A.R. 5-3-5n. Authorized place of use. (a) Except as set forth in subsection (b), each approval of application, or an approval of an application for change filed in accordance with K.S.A. 82a-708b, and amendments thereto, shall describe the authorized place of use as either of the following:

(1) Land not authorized for beneficial use of water by any other water right or approval of application; or

(2) exactly the same land authorized for beneficial use of water by one or more prior approvals of applications or water rights.

(b) The requirement in subsection (a) shall not apply to applications that propose to partially overlap the authorized place of use with any of the following:

- (1) A municipality;
- (2) an irrigation district;
- (3) an irrigation ditch company;
- (4) a rural water district;
- (5) another authorized place of use that cannot all be physically served by all of the water rights and approvals of applications;

- (6) an authorized place of use that is owned by different landowners who do not operate together; or
- (7) the owner or owners of the water rights and approvals of applications demonstrate both of the following to the chief engineer:
 - (A) It is not practical or desirable to have a complete overlap.
 - (B) Allowing an incomplete overlap of authorized places of use will not prejudicially and unreasonably affect the public interest. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-709; effective Sept. 22, 2000.)

K.A.R. 5-3-6. Forfeiture, revocation and dismissal. Failure of the applicant or his or her successors to comply with the provisions of the approval of application and permit to proceed and its terms, conditions and limitations without good cause shall result in the forfeiture of the priority date, revocation of the permit and dismissal of the application. (Authorized by K.S.A. 82a-706a; modified, L. 1978, ch. 460, May 1, 1978.)

K.A.R. 5-3-6a. Sealing pumps. If the chief engineer, or any of his or her duly authorized representatives, has reasonable cause to believe that any person has failed to obey an order of the chief engineer to cease and desist from operating a pump or other diversion device, the chief engineer or his or her duly authorized representative shall place a seal, or chain and padlock, on the pump or device in such a manner as to render the pump or other diversion device inoperable.

If the seal, or chain and padlock, is broken without the written permission of the chief engineer, this shall create a rebuttable presumption that the pump had been unlawfully operated in violation of the order of the chief engineer and that the water right holder has been acting in violation of the conditions of his or her permit to appropriate water for beneficial use.

The suspected violator shall be informed in writing of the creation of this presumption at the time the seal, or chain and padlock, is installed on the pump or other diversion device. (Authorized by K.S.A. 82a-706a, 82a-706b; effective May 1, 1980.)

K.A.R. 5-3-7. Request for extension of time. (a) For applications filed after May 1, 1978, any request for extension of time either for completion of diversion works or for perfecting the appropriation shall be submitted to the chief engineer before the expiration of the time allowed for completing the diversion works or perfecting the appropriation. The request shall be signed by the holder of the approval of application and permit to proceed, by the owner of the land to be irrigated, by an authorized official of a municipality, corporation or partnership, or by any other person that has a recognized interest in the appropriation. Failure to request an extension of time to perfect the appropriation within the time allowed shall limit the water appropriation right to the extent perfected in accordance with the terms, conditions, and limitations set forth in the approval of application.

(b) The request for an extension of time either for completion of diversion works or for perfecting the appropriation shall be accompanied by the statutorily required filing fee and shall include the following information:

- (1) The application number;
 - (2) the date by which the diversion works will be completed or the appropriation will be perfected;
 - (3) the progress that has been made toward completing the diversion works or perfecting the appropriation;
 - (4) if for irrigation, the number of acres of land to which water has been applied during one calendar year;
 - (5) the reason why the diversion works have not been completed or the appropriation has not been perfected; and
 - (6) the plans for completing the diversion works or perfecting the appropriation.
- (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-714(e); modified, L. 1978, ch. 460, May 1, 1978; amended Oct. 24, 2003.)

K.A.R. 5-3-8. Certificate of appropriation. Upon determination that the appropriation diversion works have been completed and an appropriation right perfected in conformity with an approved application and plans, the chief engineer shall issue a certificate of appropriation setting forth the extent to which the appropriation right was perfected. No appropriation shall be determined for a quantity of water or a diversion rate in excess of that set forth in the approval of application and permit to proceed or in excess of that found to have been actually applied to the approved beneficial use or for any quantity of water found to have been wasted during the calendar year of record used as the basis for perfecting the appropriation right. (Authorized by K.S.A. 82a-706a; modified, L. 1978, ch. 460, May 1, 1978.)

K.A.R. 5-3-9. Public interest. (a) In accordance with K.S.A. 82a-711(b)(5), as amended, in ascertaining whether a proposed use will prejudicially and unreasonably affect the public interest, the chief engineer shall also take into consideration the quantity, rate and availability of water necessary to:

- (1) satisfy senior domestic water rights from the stream;
- (2) protect senior water rights from being impaired by the unreasonable concentration of naturally occurring contaminants; and
- (3) over the long term reasonably recharge the alluvium or other aquifers hydraulically connected to the stream.

(b) Unless otherwise provided by regulation, it shall be considered to be in the public interest that only the safe yield of any source of water supply, including hydraulically connected sources of water supply, shall be appropriated. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-711; effective Nov. 28, 1994.)

K.A.R. 5-3-10. Availability of water for appropriation - safe yield. (a) Except as set forth in subsection (b) and K.A.R. 5-3-16 and K.A.R. 5-3-17, the approval of any new application to appropriate groundwater or surface water for beneficial use, except for domestic use, temporary use and term permits for five years or less, shall not cause the safe yield of the source of water supply to be exceeded, neither shall it otherwise prejudicially and unreasonably affect the public interest. The

approval of term permits shall not allow impairment nor prejudicially and unreasonably affect the public interest.

(b) This regulation shall not apply to an application which proposes:

(1) to divert water from a source of water supply subject to a different safe yield, allowable appropriation, depletion or other similar type of criteria adopted by rule and regulation of the chief engineer or intensive groundwater use control area order of the chief engineer issued pursuant to K.S.A. 82a-1036 et seq., or

(2) to use water in a manner so that there is no significant net consumptive use of the local source of supply either in quantity or availability of water for use by other appropriators.

(c) If a total quantity of water that is available for appropriation in any basin, subbasin, stream reach or other hydrologic unit has been determined by the chief engineer prior to the date that application is filed, the total quantity of water authorized by vested rights, prior appropriations, requests by prior unapproved applications and the proposed appropriation shall be determined by the chief engineer.

(1) If the total quantity of water authorized and requested by applications with earlier filing dates is less than or equal to the total annual quantity of water determined to be available for appropriation, or if no total quantity of water available was determined by the chief engineer prior to the date the application was filed, the following procedures shall be used by the chief engineer to further evaluate the applications:

(A) K.A.R. 5-3-11 shall be used to evaluate an application to appropriate groundwater from an unconfined aquifer;

(B) K.A.R. 5-3-14 shall be used to evaluate an application to appropriate groundwater from a confined aquifer; or

(C) K.A.R. 5-3-15 shall be used to evaluate an application to appropriate surface water.

(2) If the total quantity of water authorized and requested exceeds the limit determined by the chief engineer pursuant to this subsection, the application shall be denied or considered only for the quantity available. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-711; effective Nov. 28, 1994.)

K.A.R. 5-3-11. Availability of water for appropriation-safe yield; unconfined groundwater aquifers. (a) Each application to appropriate groundwater from an unconfined aquifer shall be processed in accordance with this regulation.

(b) To determine the safe yield available for appropriation from an unconfined aquifer at a specific location, the following procedure shall be used by the chief engineer:

(1) The amount of calculated recharge occurring within the area of consideration shall be determined by the chief engineer.

(2) That amount shall be multiplied by the percent of calculated recharge determined by the chief engineer to be available nondomestic groundwater and surface water for appropriation.

(3) The total quantity of water authorized and requested in the same area of consideration shall be subtracted from the number derived from paragraph (b)(2) above. If a water right or permit

authorizes more than one point of diversion and not all of them are within the area of consideration, the authorized quantity shall be divided equally between or among all the points of diversion, unless information is available to more accurately distribute the authorized quantity between or among the multiple points of diversion.

(c)(1) If the quantity of water remaining is sufficient to satisfy the proposed application, then the safe yield criteria shall be deemed to have been met, unless there are other relevant factors that need to be taken into account in order to protect the public interest. The application shall then be processed according to other criteria in effect in that area.

(2) If there is sufficient water available to reasonably satisfy part of the request, then the application shall be approved for the quantity available if the remaining quantity is reasonable for the proposed use and the application meets the other applicable criteria in that area.

(3) If no water is available to satisfy the proposed application, then the application shall be denied by the chief engineer.

(d)(1) In making a safe yield calculation, unless the context clearly requires otherwise, the following words and phrases shall have the meanings ascribed to them:

(A) "Circle" means a circle with a two-mile radius, with the proposed point of diversion as the center.

(B) "Area of consideration" means the portion of the two-mile circle located within the limits of the unconfined aquifer expressed in acres, including any area of the circle located within the boundaries of a groundwater management district. The area of consideration shall not include any portion of the circle located outside the state of Kansas.

(C) "Total quantity of water" means the total combined authorized annual quantities under all groundwater rights and approvals of applications, and requested by pending applications with a senior priority in that unconfined aquifer except for domestic use, temporary permits, and term permits for five or fewer years with priority dates senior to the proposed application and with points of diversion located within the area of consideration.

(D) "Calculated recharge" means that portion of the average annual precipitation that becomes recharge to the unconfined aquifer, calculated using the data shown on water resources investigations report 87-4230, plate no. 4, dated 1987, prepared by the United States geological survey, hereby adopted by reference, interpolated to the nearest tenth of an inch, unless better or more specific recharge data for the area of consideration, basin, or aquifer is supplied by the applicant or is already available to the chief engineer. **(See insert, pg 43.)**

(2) The calculated recharge in the Kansas river alluvium shall be determined by taking 25% of the average annual rainfall in the area of consideration as taken from figure 2, United States geological survey water resources investigation report 92-4137, dated 1993, hereby adopted by reference, interpolated to the nearest 0.1 of an inch. **(See insert, pg 44.)**

(3) For each application to appropriate groundwater from an unconfined aquifer filed on or after the effective date of this regulation, the percentages of calculated recharge that shall be considered to be available for appropriation shall be determined using the following table:

Percent of CalculateRecharge Available for Appropriation	River Basin
(A) 100% plus the recharge from the Missouri River available to the well, as calculated by a Jenkins or similar stream-depletion technique. (B) 100%	Missouri Arkansas River below Hutchinson* Big Blue River ** Black Vermillion River ** Delaware River ** Little Arkansas River below GMD No. 2 * Little Blue River ** Little Osage River ** Lower Republican River Basin outside the effective alluvium and the Belleville formation that does not contribute significant baseflow to a stream** Marais des Cygnes River ** Mill Creek ** Marmaton River ** Nemaha River ** Pottawatomie Creek ** Smoky Hill River below its confluence with the Saline River** Spring River* Stranger Creek** Sugar Creek** Vermillion Creek** Wakarusa River** Walnut River* Any hydrologic unit that does not contribute significant baseflow to a stream.
(C) 75%	Any hydrologic units in the following river basins that contribute significant baseflow to a stream: Arkansas River above Hutchinson* Caney River* Cottonwood River* Cow Creek outside the boundaries of GMD No. 2 and GMD No. 5* Elk River* Fall River* Kansas River** Little Arkansas River above GMD No. 2 LowerRepublican River Basin outside the effective alluvium and the Belleville formation that contributes significant baseflow to a stream.** Neosho River* Ninnescah River* Saline River** Salt Creek** Smoky Hill above its confluence with the Saline River** Solomon River**

**Percent of CalculateRecharge Available
for Appropriation**

River Basin

(D) 50%

South Fork Ninnescah River (except Smoots Creek)*
Upper Republican Basin outside areas closed to new appropriations as set forth in paragraph (d)(5) of this regulation.**
Verdigris River*
Any other basin in Kansas not specifically identified
Any hydrologic units in the following river basins that contribute significant baseflow to a stream:
Bluff Creek-Chikaskia River*
Bluff Creek-Cimarron River*
Chikaskia River*
Cimarron River outside GMD No. 3*
Medicine Lodge River*
North Fork Ninnescah River*
Rattlesnake Creek*
Salt Fork Arkansas River*
Sandy Creek*
South Fork Ninnescah River (Smoots Creek only)*

* Located in Arkansas River Basin

** Located in Kansas River Basin

(4) The total quantity of water and the percent of calculated recharge originally available to be appropriated for nondomestic groundwater and surface water use in all or part of the following basins, subbasins, stream reaches, and other hydrologic units identified in electronic data file unitbsn.e00, dated July 30, 1997, prepared by the division of water resources, Kansas department of agriculture and hereby adopted by reference for the purpose of defining the boundaries of the hydrologic units, shall be determined using the following table:

South-Central Kansas Designated Unit Areas

Map Label	Effective Date	Area (acres)	Recharge Rate (in/yr)	Recharge Quantity (Ac-ft/yr)	Percentage of Recharge to Appropriate	Original Quantities Available (Ac-ft/yr)	General Location (Twp.-Range)	Abbreviation for Portion of Basin or Basins
1	November 28, 1994	32204	1.8	4831	100%	4831	29-12w	Chikaskia
2	November 28, 1994	41426	1.8	6214	100%	6214	30-11w	Chikaskia
3	November 28, 1994	55524	1.8	8329	50%	4164	29-10w	Chikaskia
4	November 28, 1994	43603	1.8	6540	50%	3270	30-10w	Chikaskia
5	November 28, 1994	46828	2.0	7805	50%	3902	31-05w	Chikaskia
6	November 28, 1994	46895	2.5	9770	50%	4885	33-03w	Chikaskia
7	November 28, 1994	37378	3.0	9344	50%	4672	34-02w	Chikaskia
8	November 28, 1994	42210	3.0	10553	50%	5276	33-01w	Chikaskia
9	November 28, 1994	15145	2.0	2524	100%	2524	30-08w	Chikaskia
10	November 28, 1994	6855	2.0	1143	100%	1143	31-06w	Chikaskia
11	November 28, 1994	2824	2.0	471	100%	471	31-06w	Chikaskia
12	November 28, 1994	8548	2.0	1425	100%	1425	31-05w	Chikaskia
13	November 28, 1994	12165	2.0	2027	50%	1014	31-07w	Chikaskia

South-Central Kansas Designated Unit Areas

Map Label	Effective Date	Area (acres)	Recharge Rate (in/yr)	Recharge Quantity (Ac-ft/yr)	Percentage of Recharge to Appropriate	Original Quantities Available (Ac-ft/yr)	General Location (Twp.-Range)	Abbreviation for Portion of Basin or Basins
14	November 28, 1994	27213	2.0	4535	50%	2268	32-05w	Chikaskia
15	November 28, 1994	21101	1.5	2638	50%	1319	31-15w	Medicine Lodge
16	November 28, 1994	7489	1.5	936	50%	468	32-11w	Medicine Lodge
17	November 28, 1994	20516	1.5	2564	50%	1282	33-11w	Medicine Lodge
18	November 28, 1994	34426	1.5	4303	50%	2152	29-19w	Rattlesnake
19	November 28, 1994	25566	1.5	3196	50%	1598	29-18w	Medicine Lodge
20	November 28, 1994	56730	1.8	8509	100%	8509	29-14w	Medicine Lodge
21	November 28, 1994	41800	1.8	6270	50%	3135	30-12w	Medicine Lodge
22	November 28, 1994	15825	1.2	1582	50%	791	30-17w	Medicine Lodge
23	November 28, 1994	59864	1.5	7483	50%	3742	29-16w	Medicine Lodge
24	November 28, 1994	37658	1.5	4707	100%	4707	29-15w	Medicine Lodge
25	November 28, 1994	102144	1.9	16173	75%	12130	28-09w	SF Ninnescah
26	November 28, 1994	10638	2.0	1773	75%	1330	28-07w	SF Ninnescah
27*	Revision	84047	2.0	14008	50%	7004	26-07w	SF Ninnescah
28	November 28, 1994	5196	2.2	953	75%	714	28-04w	SF Ninnescah
29	November 28, 1994	73816	1.9	11688	100%	11688	28-07w	Chik/SFNin/Nin
30	November 28, 1994	38651	2.0	6442	100%	6442	30-05w	Chik/SFNin/Nin/Ark
31	November 28, 1994	5572	2.3	1068	100%	1068	31-04w	Chik/Ark
32	November 28, 1994	21937	2.0	3656	100%	3656	27-07w	SF Ninnescah
33	November 28, 1994	40646	2.5	8468	75%	6351	23-08w	Arkansas
34	November 28, 1994	41974	2.3	8045	75%	6034	24-08w	NF Ninnescah
35	November 28, 1994	3917	2.0	653	75%	490	26-08w	NF Ninnescah
36	November 28, 1994	12106	2.0	2018	75%	1513	27-10w	NF Ninnescah
37	November 28, 1994	8135	2.0	1356	75%	1017	26-08w	NF Ninnescah
38*	Revision	34550	1.2	3455	50%	1728	32-20w	Bluff Creek (Cim)
39	November 28, 1994	21875	1.2	2188	50%	1094	33-20w	Bluff Creek (Cim)
40	November 28, 1994	11466	1.2	1147	50%	573	33-20w	Bluff Creek (Cim)
41	November 28, 1994	8565	1.6	1142	50%	571	34-17w	Salt Fork Arkansas
42	November 28, 1994	3746	1.6	499	50%	250	33-15w	Salt Fork Arkansas
43	November 28, 1994	9763	1.6	1302	50%	651	34-15w	Salt Fork Arkansas
44	November 28, 1994	33060	1.8	4959	100%	4959	31-10w	Sandy Cr
45	November 28, 1994	3922	1.8	588	100%	588	33-09w	Sandy Cr
46	November 28, 1994	26959	1.8	4044	50%	2022	32-10w	Sandy Cr
47	November 28, 1994	41296	1.8	6194	50%	3097	34-09w	Sandy Cr
48	November 28, 1994	36364	1.9	5758	50%	2879	31-08w	Bluff Creek (Chik)
49	November 28, 1994	45511	2.0	7585	50%	3793	32-07w	Bluff Creek (Chik)
50	November 28, 1994	23546	2.3	4513	50%	2257	34-06w	Bluff Creek (Chik)
51	November 28, 1994	25608	2.7	5762	50%	2881	35-03w	Bluff Creek (Chik)
52	November 28, 1994	4460	1.9	706	100%	706	32-09w	Sandy Cr

South-Central Kansas Designated Unit Areas

Map Label	Effective Date	Area (acres)	Recharge Rate (in/yr)	Recharge Quantity (Ac-ft/yr)	Percentage of Recharge to Appropriate	Original Quantities Available (Ac-ft/yr)	General Location (Twp.-Range)	Abbreviation for Portion of Basin or Basins
53	November 28, 1994	17083	2.0	2847	100%	2847	33-08w	Sandy Cr/Bluf (Chik)
54	November 28, 1994	3845	2.0	641	50%	320	32-08w	Sandy Cr/Bluf (Chik)
55	July 5, 1996	3582	1.2	358	50%	179	35-18w	Cimarron
56	July 5, 1996	10967	1.2	1097	50%	548	35-19w	Cimarron
57	July 5, 1996	37387	1.2	3739	50%	1869	34-20w	Cimarron
58	July 5, 1996	3379	1.3	366	50%	183	33-21w	Cimarron
59	July 5, 1996	5885	1.3	638	50%	319	35-22w	Cimarron
60	July 5, 1996	14854	1.3	1609	50%	805	33-22w	Cimarron
61	July 5, 1996	34080	1.3	3692	50%	1846	34-22w	Cimarron
62	July 5, 1996	25419	1.3	2754	50%	1377	31-17w	Salt Fork
63	July 5, 1996	29813	1.3	3230	15%	484	32-17w	Salt Fork
64	July 5, 1996	90035	1.3	9754	50%	4877	31-18w	Salt Fork
65	July 5, 1996	35931	1.3	3893	50%	1946	31-19w	Bluff Creek
66	July 5, 1996	100983	1.3	10940	50%	5470	30-20w	Bluff-Rattlesnake
67	July 5, 1996	111132	1.2	1113	50%	5557	30-24w	Bluff-Crooked
68	July 5, 1996	12188	1.2	1219	50%	609	31-23w	Cimarron
69	July 5, 1996	5518	1.2	552	50%	276	31-24w	Cimarron
70	July 5, 1996	32689	1.2	3269	50%	1634	32-25w	Cimarron
71	July 5, 1996	94734	1.3	10263	50%	5131	32-26w	Cim-Crooked
72	July 5, 1996	44833	1.3	4857	50%	2428	33-27w	Cim-Crooked
73	July 5, 1996	50088	1.3	5426	50%	2713	34-27w	Cim-Crooked
74	July 5, 1996	25210	1.3	2731	50%	1366	35-27w	Cim-Crooked
75	July 5, 1996	103816	1.3	11247	50%	5623	34-24w	Cim-Crooked
76	July 5, 1996	23296	1.2	2330	50%	1165	30-22w	Bluff-Rattlesnake
77	July 5, 1996	27666	1.2	2767	50%	1383	32-15w	Salt-Medicine
78	July 5, 1996	5261	1.2	526	100%	526	35-13w	Salt Fork
79	July 5, 1996	8249	1.8	1237	50%	619	31-12w	Medicine

* Revision is effective the date of this regulation.

(See insert, pg 45.)

(5) The following hydrologic units, which have been determined by the chief engineer to be fully appropriated based on the safe yield criteria, shall be closed to further new surface water and groundwater appropriations except for domestic use, temporary permits, and term permits for five years or less:

(A) Big Creek, its tributaries and their valley alluviums, and any other aquifer that has a substantial hydraulic connection to an alluvium;

(B) Beaver Creek and Little Beaver Creek, their tributaries and their alluviums, and any other aquifer that has a substantial hydraulic connection to an alluvium;

(C) North Fork Solomon River, its tributaries and their alluviums, and any other aquifer that has a substantial hydraulic connection to an alluvium;

(D) Prairie Dog Creek, its tributaries and their alluviums, and any other aquifer that has a substantial hydraulic connection to an alluvium;

(E) Sappa Creek, its tributaries and their alluviums, and any other aquifer that has a substantial hydraulic connection to an alluvium;

(F) South Fork of the Solomon River, its tributaries and their alluviums above Glen Elder Dam, and any other aquifer that has a substantial hydraulic connection to an alluvium; and

(G) Walnut Creek, its tributaries and their alluviums, and other hydraulically connected aquifers outside the boundaries of the intensive groundwater use control area created by order of the chief engineer shall be those set forth below:

Section	Township	Range	County
28 through 33	18S	23W	Barton
4 through 10 and 14 through 36	18S	14W	Barton
1 through 36	18S	25W	Barton
3 through 11 and 14 through 23	29S	13W	Barton
1 through 6, 9 through 15, and 22 through 24	29S	14W	Barton
1	19S	15W	Barton
31 through 35	17S	16W	Rush
19 through 36	17S	17W	Rush
19 through 36	17S	18W	Rush
23 through 26 and 31 through 36	17S	19W	Rush
35 and 36	17S	20W	Rush
1 through 36	18S	16W	Rush
1 through 36	18S	17W	Rush
1 through 36	18S	18W	Rush
1 through 36	18S	19W	Rush
1 through 36	18S	20W	Rush
3 through 6	19S	16W	Rush
1 through 6	19S	17W	Rush
1, 2, 11, and 12	19S	20W	Rush
32 through 34	17S	25W	Ness
1 through 36	18S	21W	Ness
1 through 4 and 7 through 36	18S	22W	Ness
19, 25 through 36	18S	23W	Ness
23 through 27, 35, and 36	18S	24W	Ness
1 through 5, 10 through 13, 24, 33 and 34	28S	25W	Ness
4 through 9	19S	21W	Ness
1 through 12, 17 and 18	19S	22W	Ness
1 through 23	19S	23W	Ness
1, 2, and 7 through 29	19S	24W	Ness
1 through 3 and 11 through 13	19S	25W	Ness

(6) “Technical guidelines for determining the availability of groundwater for appropriation in the Lower Republican River Basin and Belleville Formation and the availability of surface water for appropriation in the Lower Republican River Basin,” adopted by the chief engineer, division of water resources, Kansas department of agriculture, on October 1, 1999, is hereby adopted by reference as determining the availability of groundwater for appropriation in the lower Republican

River basin and Belleville formation and the availability of surface water for appropriation in the lower Republican River basin. **(See insert, pgs 46 - 53.)**

(7)(A) All applications for a permit to appropriate groundwater from the area described in paragraph (7)(B) for any beneficial use, except for domestic use, temporary permits, and short-term permits for five or fewer years, shall be accepted for filing and given a file number, if acceptable for filing. The application shall be returned by the chief engineer, and the reason that the application will be denied shall be specified by the chief engineer. The applicant shall be given 30 days to show cause why the application should not be denied. If the applicant does not show good cause, the application shall be dismissed.

(B) The area is described as sections 17, 18, 19, 20, township 7 south, range 6 west, and sections 13, 14, township 7 south, range 7 west, all in Mitchell County, Kansas.

(C) All applications for permits to appropriate groundwater from sections 29 and 30 in township 7 south, range 6 west, and sections 12, 15, 16, 21, 22, 23, 24, 25, 26, and 27 in township 7 south, range 7 west, all in Mitchell County, Kansas, for any beneficial use, except for domestic use, temporary permits, and term permits for five or fewer years, shall be processed based on the criteria set forth below in paragraph (7) (D).

(D) No new wells shall be allowed in the area described in paragraph (7) (C) above if the proposed well would produce one foot or more of additional drawdown at any existing well in that area and if the proposed well was pumped continuously for 45 days (1,080 hours) at the rate requested on the application. This analysis shall be done by using the Theis equation, with a coefficient of transmissivity of 71,000 gallons per day per foot (gpd/ft) and a coefficient of storage of 0.02.

(E) Any application for a change in the point of diversion filed for a well located in the areas described in paragraphs (7) (B) and (C) above shall be limited to a move of no more than 100 feet, unless the applicant can show the chief engineer that the proposed move will not prejudicially and unreasonably affect the public interest, will not impair existing water rights, and otherwise complies with the provisions of K.S.A. 82a-708b, and amendments thereto. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-711; effective Nov. 28, 1994; amended Sept. 22, 2000.)

K.A.R. 5-3-12. (Authorized by K.S.A. 82a-701(g), 82a-706a; effective May 1, 1980; revoked May 1, 1987.)

K.A.R. 5-3-13. Dewatering of construction sites. The chief engineer shall limit the time in which water may be withdrawn for dewatering purposes. Any water right that may be perfected by the dewatering project shall be deemed abandoned and terminated upon the completion of the dewatering project. Any extension of time in which to complete the project must be requested in writing by the applicant prior to the expiration date on the permit. (Authorized by K.S.A. 82a-706a, 82a-712; effective May 1, 1980.)

K.A.R. 5-3-14. Availability of water for appropriation - safe yield; confined groundwater aquifers. (a) Each application to appropriate water from a confined aquifer shall be processed on a case by case basis so that the safe yield of the source of water supply is not exceeded.

(b) Until a specific regulation is adopted by the chief engineer for the confined source of water supply, the analysis shall be made using the best information reasonably available to the chief engineer. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-711; effective Nov. 28, 1994.)

K.A.R. 5-3-15. Availability of water for appropriation - safe yield; surface water. (a) Each application filed to directly divert the natural flow of the Kansas river, the Missouri river, the Big Blue river, the Spring river, or their tributaries, shall:

- (1) be processed in accordance with K.A.R. 5-3-9; and
- (2) meet all other requirements for the approval of a new application.

(b) The water right owner shall be required by the chief engineer to meet minimum desirable streamflows (MDS), assurance district target flows (assurance target flows) and division of water resources (DWR) target flows where applicable.

(c) Each application filed to directly divert the natural flow from any stream or tributary in the state of Kansas, except those streams listed in paragraph (a) of this regulation, shall have the following conditions of approval.

(1) If MDS or assurance target flows or DWR target flows have been set for that stream, and MDS administration has been requested by the Kansas water office, diversion of natural flow shall only be permitted if MDS, assurance target flows or DWR target flows, if applicable, are being met at the gage or gages immediately below the proposed point of diversion.

(2) Diversion of natural flow shall not take place unless there is water available to satisfy all demands by senior water rights and permits.

(3) The streamflow shall not be stopped at the first riffle below the point of diversion while diversion is taking place under the authority of that water right or permit.

(4) During the period October 1 through June 30, the verbal or written permission of the chief engineer, or an authorized representative of the chief engineer, shall be obtained in order to divert water each time the applicant desires to divert water.

(5) The applicant shall be required to demonstrate that the direct diversion of streamflow is not necessary during the period July 1 through September 30 each calendar year because of lack of need; the availability of adequate water storage or alternative water supplies; or other similar reasons.

(6) During the period July 1 through September 30 each calendar year, no direct diversions of water shall be permitted unless written permission is obtained from the chief engineer or the chief engineer's authorized representative.

(d) Each application filed by a member of an operational assurance district for that stream shall be processed taking into consideration the provisions of the assurance district contract.

(e) Each application filed for a point of diversion which might divert water released from storage pursuant to an agreement between the state of Kansas and the federal government shall be processed taking into consideration the provisions of that agreement.

(f) Each application filed to divert the natural flow of any stream subject to a more specific regulation adopted by the chief engineer or an intensive groundwater use control area order issued by the chief engineer, for a basin or portion thereof, shall be processed in accordance with the provisions of that regulation or order. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-711; effective Nov. 28, 1994.)

K.A.R. 5-3-16. Safe yield; exemptions for up to 15 acre-feet of groundwater. In any area of the state outside a groundwater management district that is subject to safe yield criteria and is not closed by regulation or intensive groundwater use control area order by the chief engineer to new nondomestic, nontemporary permits and term permits for five or fewer years, applications to appropriate groundwater shall be exempt from meeting the safe yield criteria if the chief engineer finds that all of the following conditions are met:

(a) The sum of the annual quantity requested by the proposed appropriation and the total annual quantities authorized by prior permits allowed because of an exemption pursuant to this regulation does not exceed 15 acre-feet in a ½-mile-radius circle surrounding the proposed point of diversion.

(b) Well spacing criteria in the area have been met.

(c) The approval of the application does not authorize an additional quantity of water out of an existing authorized well with a nondomestic permit or water right, which would result in a total combined annual quantity of water authorized from that well in excess of 15 acre-feet.

(d) All other criteria for processing a new application to appropriate water at that location have been met. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-711; effective Nov. 28, 1994; amended Sept. 22, 2000.)

K.A.R. 5-3-16a. Closed areas; exemptions for up to five acre-feet of groundwater. In any area of the state that is outside a groundwater management district and an intensive groundwater use control area (IGUCA) and that is closed to new appropriations of groundwater by regulation except for domestic use, temporary permits, and term permits for five or fewer years, applications to appropriate groundwater shall be exempt from meeting the safe yield criteria and the regulation closing the area to new appropriations if the chief engineer finds that all of the following criteria are met:

(a) The sum of the annual quantity of groundwater requested by the proposed appropriation and the total annual quantities of groundwater authorized by prior approvals of applications allowed because of an exemption pursuant to this regulation does not exceed five acre-feet in a two-mile-radius circle surrounding the proposed point of diversion.

(b) The annual quantity of water requested is reasonable for the proposed beneficial use of water.

(c) All other criteria for processing a new application to appropriate water at that location, including spacing criteria, have been met.

(d) The approval of the application does not authorize an additional quantity of water out of an existing point of diversion that would result in a total combined annual quantity of water authorized from that point of diversion in excess of five acre-feet per calendar year.

(e) The proposed beneficial use of water will significantly benefit the public interest and help maximize economic development. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a, K.S.A. 2002 Supp. 82a-711, and K.S.A. 2002 Supp. 82a-1904; effective Oct. 24, 2003.)

K.A.R. 5-3-17. Safe yield; miscellaneous exemptions. In any area of the state which is subject to safe yield criteria, and outside a groundwater management district or an intensive groundwater use control area closed to new non-domestic, non-temporary uses, each application to appropriate groundwater for a beneficial use shall be exempt from meeting the safe yield criteria if the chief engineer finds that:

(a) the proposed use has occurred continuously since prior to the effective date of this regulation;

(b) the proposed use could have reasonably been classified by the division of water resources as a domestic use at the time the use began; and

(c) all other requirements in effect for the approval of a new application to appropriate water at that location have been met. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-711; effective Nov. 28, 1994.)

K.A.R. 5-3-18. Applicant's opportunity to submit additional information. (a) If at any stage of processing an application, it is determined by the chief engineer that an application does not meet the safe yield criteria, the applicant shall be notified by the chief engineer in writing prior to denial of the application that the safe yield requirements have not been met and the reason for the proposed denial. In this written notice, the chief engineer shall allow the applicant 15 days to request time in which to submit additional information to show why the application should be approved.

(b) Within 15 days the applicant shall either submit the additional information or file a written request for a reasonable amount of time to submit an engineering report or similar type of hydrologic analysis to show that approval of the application will not cause the safe yield of the source of water supply to be exceeded.

(c) If the applicant fails to timely show to the satisfaction of the chief engineer that the application can be approved, then the application shall be denied by the chief engineer. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-711; effective Nov. 28, 1994.)

K.A.R. 5-3-19. Maximum reasonable annual quantity of water for irrigation use. (a) For applications filed before the effective date of this regulation, the maximum annual quantity of water reasonably necessary to irrigate crops shall be determined as follows:

(1) In that area of Kansas located between the eastern border of Kansas and the western border of range 6 east, the maximum reasonable annual quantity of water shall not exceed one acre-foot of water per acre irrigated.

(2) In that area of Kansas located between the eastern border of range 5 east and the western border of range 20 west, the maximum reasonable annual quantity of water shall not exceed 1½ acre-feet of water per acre irrigated.

(3) In that area of Kansas located between the eastern border of range 21 west and the western border of Kansas, the maximum reasonable annual quantity of water shall not exceed two acre-feet of water per acre irrigated.

(b) On and after the effective date of this regulation, the maximum annual quantity of water reasonably necessary to irrigate crops shall be determined by multiplying the number of irrigated acres by the county value found on the map adopted by reference in K.A.R. 5-3-24. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a, K.S.A. 82a-707(e), and K.S.A. 2002 Supp. 82a-711; effective Sept. 22, 2000; amended Oct. 24, 2003.)

K.A.R. 5-3-20. Maximum reasonable annual quantity of water approvable for a new appropriation of water for irrigation use. (a) The maximum reasonable annual quantity of water that may be approved for use on irrigated land for applications filed before the effective date of this regulation shall be limited to the following:

(1) The quantity of water available for appropriation as determined by the safe yield, allowable appropriation or similar type of limitation adopted by regulation of the chief engineer for the area in which the proposed point of diversion will be located;

(2) the quantity of water reasonably physically available from the source of water supply based on the physical characteristics of the source of water supply and the proposed diversion works; and

(3) the quantity of water reasonably necessary to irrigate crops in the region of the state where the proposed place of use is located as set forth in K.A.R. 5-3-19(a). The authorized quantity shall be determined by multiplying the number of acres approved to be irrigated by the quantity per acre set forth in K.A.R. 5-3-19(a).

(b) The maximum reasonable annual quantity of water that may be approved for use on irrigated land for applications filed on or after the effective date of this regulation shall be limited to the following:

(1) The quantity of water available for appropriation as determined by the safe yield, allowable appropriation or similar type of limitation adopted by regulation of the chief engineer for the area in which the proposed point of diversion will be located;

(2) the quantity of water reasonably physically available from the source of water supply based on the physical characteristics of the source of water supply and the proposed diversion works; and

(3) the quantity of water reasonably necessary to irrigate crops in the region of the state where the proposed place of use is located as set forth in K.A.R. 5-3-19(b).

(c) The quantity specified in subsection (a) or (b) may be exceeded only if the applicant demonstrates both of the following to the chief engineer:

(1) Because of specialty crops or other unusual conditions, the quantity specified in K.A.R. 5-3-19 is insufficient.

(2) The requested quantity is reasonable for the intended irrigation use, is not wasteful, and will not otherwise prejudicially and unreasonably affect the public interest. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(e), K.S.A. 1999 Supp. 82a-711, and K.S.A. 82a-712; effective Sept. 22, 2000.)

K.A.R. 5-3-21. Perfection of a water right for irrigation use. (a) For applications with a priority date before the effective date of this regulation, the maximum reasonable annual quantity of water that may be perfected for irrigation use shall not exceed the following:

(1) The maximum annual quantity of water actually applied to beneficial use in any one calendar year in accordance with the terms, conditions, and limitations of the approval of application during the perfection period; and

(2) the quantity of water reasonably necessary to irrigate crops in the region of the state where the place of use is located as set forth in K.A.R. 5-3-19(a). The reasonable quantity shall be determined by multiplying the number of acres actually irrigated during the year of record by the quantity per acre as set forth in K.A.R. 5-3-19(a).

(b) For applications with a priority date on or after the effective date of this regulation, the maximum reasonable annual quantity of water that may be perfected for irrigation use shall not exceed the following:

(1) The maximum annual quantity of water actually applied to beneficial use in any one calendar year in accordance with the terms, conditions, and limitations of the approval of application during the perfection period; and

(2) the quantity of water reasonably necessary to irrigate crops in the region of the state where the place of use is located as set forth in K.A.R. 5-3-19(b). The reasonable quantity shall be determined by multiplying the number of acres actually irrigated during the year of record by the quantity per acre set as forth in K.A.R. 5-3-19(b).

(c) The quantity specified in subsection (a) or (b) may be exceeded only if the water right owner demonstrates both of the following to the chief engineer:

(1) Because of specialty crops or other unusual conditions, the quantity specified in K.A.R. 5-3-19 was insufficient.

(2) A greater quantity was reasonable for the intended irrigation use, was not wasteful, and did not otherwise prejudicially and unreasonably affect the public interest. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(e) and K.S.A. 1999 Supp. 82a-714; effective Sept. 22, 2000.)

K.A.R. 5-3-22. Maximum reasonable quantity of water for livestock and poultry. (a)

The following quantities shall be deemed the maximum quantity of water reasonable for nondomestic livestock and poultry water use:

Livestock/Poultry	Drinking Water (gallons per head per day)	Additional quantities for servicing/flushing (gallons per head per day)
Cattle, beef	15	0 (open lot) 100 [confined building capacity (cbc)]
Cattle, dairy	35	100 (cbc)
Swine		
finishing	5	15 (cbc)
nursery	1	4 (cbc)
sow and litter	8	35 (cbc)
gestating sow	6	25 (cbc)
Sheep	2	0 (open lot) 15 (cbc)
Horses	12	0 (open lot) 100 (cbc)
Poultry		
chickens (100 layers)	9	200 (cbc)
turkeys (100)	30	400 (cbc)

(b) The maximum reasonable quantity of water that may be approved for nondomestic livestock and poultry use for applications approved on or after the effective date of this regulation shall be limited as set forth in subsection (a) above. The quantities set forth in subsection (a) may be exceeded only if the applicant demonstrates both of the following to the chief engineer:

- (1) The requested quantity is reasonable for the intended use.
- (2) This quantity not wasteful and will not otherwise prejudicially and unreasonably affect the public interest.

(c) For all other types of nondomestic livestock, poultry, birds, and animals, the maximum quantity of water approved for beneficial use shall be reasonable.

(d) The maximum reasonable quantity of water that may be perfected for nondomestic livestock or poultry use shall not exceed the quantities set forth in subsections (a), (b) and (c) above, unless the water right owner demonstrates both of the following to the chief engineer:

- (1) A larger quantity of water was actually applied to beneficial use within the terms, conditions, and limitations of the permit within the perfection period.
- (2) The quantity used was not wasted. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(e), K.S.A. 1999 Supp. 82a-711, K.S.A. 82a-712, and K.S.A. 1999 Supp. 82a-714; effective Sept. 22, 2000.)

K.A.R. 5-3-23. Maximum reasonable annual quantity approvable for irrigation use for an application for change in place of use and a request to reduce a water right. (a) Except as provided in subsections (c), (d), and (e), for water rights with a priority date before the effective date

of this regulation, the maximum reasonable annual quantity of water that may be approved for either of the following shall be that quantity of water reasonably necessary to irrigate crops in the region of the state where the proposed place of use is located as set forth in K.A.R. 5-3-19(a):

(1) An application for change in place of use for irrigation filed pursuant to K.A.R. 82a-708b and amendments thereto; or

(2) a request to reduce the authorized place of use for irrigation for a water right filed pursuant to K.A.R. 5-7-5.

(b) Except as provided in subsections (c), (d), and (e), for water rights with a priority date on or after the effective date of this regulation, the maximum reasonable annual quantity of water that may be approved for either of the following shall be that quantity of water reasonably necessary to irrigate crops in the region of the state where the proposed place of use is located as set forth in K.A.R. 5-3-19(b):

(1) An application for change in place of use for irrigation filed pursuant to K.A.R. 82a-708b and amendments thereto; or

(2) a request to reduce the authorized place of use for a water right filed pursuant to K.A.R. 5-7-5.

(c) The maximum reasonable quantities approvable in subsections (a) and (b) above shall not exceed either of the following:

(1) The applicable quantity set forth in either subsection (a) or (b) above; or

(2) the maximum quantity of acre-feet per acre authorized by the vested water right or certificate of appropriation, whichever is greater. The maximum authorized quantity of acre-feet per acre shall be calculated by dividing the maximum annual quantity of water authorized at the time the application for change or request to reduce is filed by the number of acres authorized at the time the application for change is filed.

(d) The quantities set forth above in subsections (a), (b), and (c) above may be exceeded only if the applicant demonstrates both of the following to the chief engineer:

(1) Because of specialty crops or other unusual conditions, the quantity specified in K.A.R. 5-3-19(a) is insufficient.

(2) The requested quantity is reasonable for the intended irrigation use, is not wasteful, and will not otherwise prejudicially and unreasonably affect the public interest.

(e) The maximum annual quantity of water approved pursuant to this regulation shall not exceed the maximum annual quantity of water authorized by the water right at the time the change application is approved. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(e) and K.S.A. 1999 Supp. 82a-708b; effective Sept. 22, 2000.)

K.A.R. 5-3-24. Reasonable quantity for irrigation use. The Kansas department of agriculture, division of water resources' map titled "reasonable quantities for irrigation use in Kansas, by county," dated October 21, 1999, is hereby adopted by reference. **(See insert.)** (Authorized by

K.S.A. 82a-706a; implementing K.S.A. 82a-707(e), K.S.A. 1999 Supp. 82a-711, and K.S.A. 1999 Supp. 82a-714; effective Sept. 22, 2000.)

K.A.R. 5-3-25. Conditions on permits and certificates. (a) All terms, conditions, and limitations placed on an approval of application by the chief engineer pursuant to the provisions of K.S.A. 82a-712, and amendments thereto, shall remain in full force and effect until expressly modified or removed by the chief engineer.

(b) Unless the terms and conditions are expressly modified or removed by the subsequent approval, certification, or other order of the chief engineer, none of the following shall modify or remove any of the terms, conditions, and limitations placed on the original approval of applications or water right:

(1) The approval of an application to change the place of use, the point of diversion, or the use made of water under the authority of K.S.A. 82a-708b and amendments thereto;

(2) the issuance of a certificate of appropriation pursuant to K.S.A. 82a-714 and amendments thereto; or

(3) the issuance of any other findings and order relative to the approval of application or water right. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-708b, K.S.A. 1999 Supp. 82a-711, K.S.A. 82a-712, and K.S.A. 1999 Supp. 82a-714; effective Sept. 22, 2000.)

K.A.R. 5-3-26. Closed townships in Pawnee and Buckner drainage basins in Pawnee, Hodgeman, Ness and Finney counties. (a) Except as specified in subsection (c), the following townships in the Pawnee and Buckner drainage basins shall be closed to new appropriations of water:

(1) T 20 S;

(A) R 19 W through R 26 W;

(B) R 18 W, section 7 and sections 17 through 36; and

(C) R 17 W, section 31;

(2) T 21 S;

(A) R 30 W, sections 1 through 4, 9 through 16, 21 through 28, and 33 through 36;

(B) R 21 W through R 29 W;

(C) R 20 W and R 19 W, sections 1 through 6; and

(D) R 18 W, sections 1 through 24;

(3) T 22 S;

(A) R 30 W, sections 1 through 4, 9 through 16, 21 through 28, and 33 through 36;

(B) R 21 W through R 29 W;

(C) R 19 W and R 20 W, sections 13 through 36;

(D) R 18 W, sections 20 through 36; and

(E) R 17 W, sections 20, 21, and 30;

(4) T 23 S;

(A) R 22 W through R 26 W;

(B) R 21 W, sections 1 through 24, and 27 through 32;

(C) R 20 W, sections 1 through 18;

(D) R 19 W, sections 1 through 12 and 14 through 18; and

- (E) R 18 W, sections 3 through 10; and
- (5) T 24 S;
- (A) R 23 W through R 26 W;
- (B) R 22 W, sections 1 through 23 and 26 through 35; and
- (C) R 21 W, sections 5, 6, and 7.

(b) Except as specified in subsection (c), all new applications that propose a point of diversion in any of the areas described in subsection (a) that are pending approval on the effective date of this regulation shall be dismissed.

(c) The closure of the townships listed in subsection (a) to new appropriations of water shall not apply to the following types of wells:

- (1) Wells for domestic use;
- (2) wells authorized by temporary permits; and
- (3) wells authorized by term permits of fewer than five years.

This regulation shall be effective on and after October 25, 2002. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 2001 Supp. 82a-711 and K.S.A. 82a-721; effective Sept. 22, 2000; amended, T-5-6-27-02, June 27, 2002; amended Oct. 25, 2002.)

K.A.R. 5-3-27. Equus Beds special groundwater quality areas. (a) A special groundwater quality area located within the boundaries of the Equus Beds groundwater management district no. 2 shall be hereby established in the following area consisting of approximately 36 square miles in northwest Harvey County, south-central McPherson County, and northeast Reno County, Kansas:

- (1) Sections 3 through 10, 15 through 22, and 27 through 34, of township 22 south, range 3 west, Harvey County;
- (2) sections 31 through 34, township 21 south, range 3 west, and section 36, township 21 south, range 4 west, McPherson County; and
- (3) sections 1, 12, 13, 25, 26, and 36, township 22 south, range 4 west, Reno County, Kansas.

(b) Each application for a new appropriation of groundwater, a newly constructed well, or a change in the point of diversion for a well within the area shall be reviewed by the chief engineer to determine the effect of the proposed appropriation or well on the movement of saltwater pollution in the area.

(c) A test well log shall accompany each type of application described in subsection (b) within the area described in subsection (a) above and shall include the following information:

- (1) Depth to bedrock;
- (2) a water quality analysis of water taken from the bottom 20 feet of the aquifer, including sodium and chloride concentrations; and

(3) a water quality analysis of water taken within the top 20 feet of the aquifer, including specific conductance and chloride concentrations.

(d) If the chief engineer can not determine whether the proposed application will affect the movement of saltwater pollution in the area in a manner that is adverse to the public interest or that will cause impairment to other water rights by causing an unreasonable deterioration of the water quality, then the applicant shall submit any information the chief engineer needs to make that determination. The information shall be submitted within a reasonable time period specified by the chief engineer.

(e) The chief engineer shall submit the proposed application to the board of the Equus Beds groundwater management district no. 2 for its review and recommendation. The board shall have 30 days to review the application and provide its recommendation to the chief engineer. The recommendation of the board shall be considered by the chief engineer in making a decision as to whether the application can be approved as filed or modified.

(f) The application shall be dismissed and its priority forfeited if either of the following conditions is met:

(1) The chief engineer determines that approval of the application will affect the movement of saltwater pollution in the area in a manner that will prejudicially and unreasonably affect the public interest or that will cause impairment to other water rights by causing an unreasonable deterioration of the water quality because of saltwater pollution.

(2) The applicant fails to submit the information requested by the chief engineer within the time specified.

(g) The application shall be approved if both of the following conditions are met:

(1) The chief engineer determines that the approval of the application, as filed or modified, will not affect the movement of saltwater pollution in the area in a manner that is adverse to the public interest and will not cause impairment to other water rights by causing an unreasonable deterioration of the water quality because of saltwater pollution.

(2) The application meets all other statutory and regulatory criteria.

(h) In addition to reporting the information normally required in the water use reports required by K.S.A. 82a-732, and amendments thereto, each owner of a water right or approval of application shall also report the depth to the static water level in each well, in a manner acceptable to the chief engineer.

(i) All groundwater diversion works permitted in the Equus Beds special groundwater quality area shall be equipped with a water flowmeter that meets the specifications adopted by the chief engineer, except for domestic wells, temporary wells, and wells authorized by term permits for fewer than five years. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706c, K.S.A. 82a-709, K.S.A. 82a-710, K.S.A. 1999 Supp. 82a-711, and K.S.A. 82a-732; effective Sept. 22, 2000.)

K.A.R. 5-3-28. Lyons special groundwater quality area. (a) A special groundwater quality area all in Rice County, Kansas, and partially located within the boundaries of the Big Bend groundwater management district no. 5 shall be hereby established in the following described area consisting of approximately 37 square miles in central Rice County, Kansas:

- (1) Sections 33, 34, and 35 of township 19 south, range 8 west;
- (2) sections 1-4, 9-16, 21-25, township 20 south, range 8 west;
- (3) sections 7, 17-21, 27-34, township 20 south, range 7 west; and
- (4) sections 3-5, township 21 south, range 7 west.

(b) Each application for a new appropriation of groundwater, a newly constructed well, or a change in point of diversion for a well proposed to be located within the area shall be reviewed by the chief engineer to determine whether the proposed appropriation will have any adverse effect on the movement and remediation of saltwater pollution south and east of Lyons, Kansas.

(c) A test well log shall accompany each type of application filed for a point of diversion described in subsection (b) that is proposed to be located within the area described in subsection (a), and shall include the following information:

- (1) Depth to bedrock;
- (2) a water quality analysis of water taken from the bottom 20 feet of the aquifer, including analysis of sodium and chloride concentrations; and
- (3) a water quality analysis of water taken within the top 20 feet of the aquifer, including analysis of sodium and chloride concentrations.

(d) If the chief engineer can not determine whether the proposed application will affect the movement and cleanup of saltwater pollution south and east of Lyons in a manner that is adverse to the public interest or that will cause impairment to other water rights by causing an unreasonable deterioration of the water quality, then the applicant shall submit any information the chief engineer needs to make that determination. The information shall be submitted within a reasonable time period specified by the chief engineer.

(e) If the proposed point of diversion is located within the district, the proposed application shall be submitted by the chief engineer to the board of the district for review and recommendation. The board shall have 30 days to review the application and submit its recommendation to the chief engineer. The recommendation of the board shall be considered by the chief engineer in making a decision as to whether the application can be approved as filed or modified.

(f) The application shall be dismissed and its priority forfeited if either of the following conditions is met:

- (1) The chief engineer determines that approval of the application will affect the movement and cleanup of saltwater pollution south and east of Lyons in a manner that prejudicially and unreasonably affects the public interest or that will cause impairment to other water rights by causing an unreasonable deterioration of the water quality because of saltwater pollution.

(2) The applicant fails to submit the information requested by the chief engineer within the time specified.

(g) The application shall be approved if both of the following conditions are met:

(1) The chief engineer determines that the approval of the application, as filed or modified, will not affect the movement and cleanup of saltwater pollution south and east of Lyons in a manner that would prejudicially and unreasonably affect the public interest and will not cause impairment to other water rights by causing an unreasonable deterioration of the water quality because of saltwater pollution.

(2) The application meets all other applicable statutory and regulatory criteria. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706c, K.S.A. 82a-709, K.S.A. 82a-710, K.S.A. 1999 Supp. 82a-711, and K.S.A. 82a-732; effective Sept. 22, 2000.)

K.A.R. 5-4-1. Distribution of water between users where a prior right is being impaired. When a complaint is received that a prior right to the use of water is being impaired, the following procedure shall be followed:

1. The complaint shall be made to the chief engineer or his or her authorized representative. A complaint may be accepted verbally, in person or by telephone. No action shall be taken by the agency until the complaint is confirmed in writing.

2. An investigation of the physical conditions involved shall be made by the chief engineer or his or her authorized representative.

3. A written report of the investigation shall be prepared and a copy given to the complainant. If the investigation shows there is no basis for further action by the division, the complainant shall be so advised.

4. The complainant shall make a written request to secure water to satisfy his or her prior right.

5. The chief engineer or his or her authorized representative shall give a written legal notice and directive to other water users whose use of water must be regulated to secure water to satisfy the complainant's prior rights.

The request to secure water shall be made on a prescribed form furnished for that purpose by the division of water resources. All water delivered to the user's point of diversion for his or her use at the specified rate or less shall be applied to the authorized beneficial use and count against the quantity of water specified unless the user notifies the chief engineer or his or her authorized representative that diversion and use will be discontinued for a period of time for good reason.

When the quantity of water needed has been delivered to the user's point of diversion or when the user discontinues his or her use of water, those persons who have been directed to regulate their use shall be notified that they may resume the diversion and use of water.

If the available water supply in the source should increase, the chief engineer or his or her authorized representative may allow some or all of the users regulated to resume use depending on the supply. (Authorized by K.S.A. 82a-706a; modified, L. 1978, ch. 460, May 1, 1978.)

K.A.R. 5-4-4. Well spacing. (a) The spacing between wells shall be sufficient to prevent direct impairment between wells located in a common source of supply or hydraulically connected sources of supply and to protect the public interest. Except as set forth in subsection (b), the following guidelines shall be used to determine the spacing required between wells permitted by the chief engineer in a common source of supply, unless it is determined by the chief engineer in any specific instance that the spacing guidelines set forth in this regulation are insufficient to prevent direct impairment or are not necessary to prevent direct impairment.

(b) Whenever an applicant proposes to divert water from a source of supply in a location where there is a significant hydraulic connection between the proposed source of supply and another source or sources of supply, the chief engineer shall determine the spacing necessary to prevent impairment and to protect the public interest on a case by case basis.

(c) Except as set forth in subsection (e) below, each well that is described in an application for a permit to appropriate water for beneficial use or for a term permit, excluding any domestic or temporary well, shall meet the minimum spacing requirements set out in paragraphs (1) and (2) below.

(1) The minimum distance from the well which is the subject of the application to all other senior authorized non-domestic and non-temporary wells in the same aquifer or a hydraulically connected aquifer shall be:

(A) four miles between wells whose common source of supply is the confined Dakota aquifer system;

(B) one-half mile between wells whose common source of supply is the unconfined Dakota aquifer system; and

(C) 1320 feet for wells whose common source of supply is any other aquifer.

(2) In addition to meeting the minimum spacing requirements of paragraph (1) above, the minimum distance from the well which is the subject of the application to all domestic wells, except where the domestic well owner has given the applicant written permission to reduce the spacing interval, shall be:

(A) one-half mile for wells whose common source of supply is the confined Dakota aquifer system;

(B) 1320 feet for wells whose common source of supply is the unconfined Dakota aquifer system; and

(C) 660 feet for wells whose common source of supply is any other aquifer.

(d) Except as provided in subsection (e), the location of a well or wells on an application to change the point of diversion under an existing water right shall either:

(1) meet the spacing requirements in paragraphs (c)(1) and (c)(2) above; or

(2) not decrease the distance to other wells or authorized well locations by more than 300 feet.

(e) This regulation shall not apply if the chief engineer has adopted another regulation, or issued an order pursuant to K.S.A. 82a-1036 *et seq.*, specifying a different well spacing for the source of supply in which the proposed point of diversion is located.

(f) In the case of a battery of wells, the distance shall be measured from the geographic center of the points of diversion comprising the battery.

(g) If the proposed point of diversion does not meet the well spacing requirements in this regulation, the applicant shall be notified by the chief engineer in writing prior to dismissal that the requirements have not been met. The applicant shall then have 15 days to request time in which to submit additional information. Upon written request, the applicant shall be given a specified reasonable amount of time by the chief engineer to submit an engineering or similar type of hydrologic analysis to show that the spacing can be decreased without impairing existing rights or prejudicially and unreasonably affecting the public interest. The burden shall be on the applicant to make such a showing to the satisfaction of the chief engineer. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-711; effective May 31, 1994.)

K.A.R. 5-4-5. Approval of application for additional rate only. (a) Except as set forth in subsection (c), an application for a permit to appropriate water for beneficial use that requests only an increase in the authorized rate of diversion, and no net increase in maximum annual quantity, from a specific point of diversion already authorized by another water right or approval of application shall be exempt from complying with any safe yield, allowable appropriation, or similar type of criteria adopted by the chief engineer if both of the following conditions are met:

(1) The application requests only an increase in the authorized maximum rate of diversion of 15 percent or less.

(2) There has been no significant physical enlargement of the capacity of the original diversion works to divert water. If a well has been replaced, reconstructed, and reequipped in accordance with an approval of an application for change by the chief engineer pursuant to K.S.A. 82a-708b and amendments thereto in substantially the same way that the original diversion works were constructed, that type of well shall not be considered to be a significant physical enlargement of the diversion works. Conversion to a battery of wells or adding an additional well shall be considered to be a significant physical enlargement of the capacity of the diversion works.

(b) Except as set forth in subsection (c), an application to increase the rate of diversion by more than 15 percent that requests no net increase in maximum annual quantity from a specific point of diversion already authorized by another water right or approval of application shall be exempt from complying with any safe yield, allowable appropriation, or similar type of criteria adopted by the chief engineer if the conditions in either paragraph (b)(1) or (2) are met:

(1)(A) The application was filed within the time authorized to perfect any water right authorizing that point of diversion.

(B) The application is filed to increase the authorized maximum rate of diversion to the rate the original diversion works were physically capable of diverting water under actual maximum operating conditions, or less.

(2) The appropriator demonstrates to the chief engineer that authorizing an increase in the rate of diversion meets the following criteria:

(A) Will not impair existing water rights;

(B) will not prejudicially and unreasonably affect the public interest; and

(C) will not substantially increase the consumptive use in violation of K.A.R. 5-5-3.

(c) If the chief engineer adopts a regulation pertaining to applications for additional rate only for a specific groundwater management district, or issues an order concerning that type of application pursuant to an intensive groundwater use control area (IGUCA) proceeding authorized by K.S.A. 82a-1036 et seq. and amendments thereto, the application for additional rate shall be processed by the chief engineer pursuant to the provisions of that regulation or IGUCA order. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-701(f), K.S.A. 1999 Supp. 82a-711, K.S.A. 82a-712, K.S.A. 82a-1036, K.S.A. 82a-1037, K.S.A. 1999 Supp. 82a-1038, K.S.A. 82a-1039, and K.S.A. 82a-1040; effective Sept. 22, 2000.)

K.A.R. 5-4-8. Custodial care of the state. (a) For any groundwater or surface water right placed in the custodial care of the state, the following criteria shall be met by the chief engineer:

(1) Not reappropriate the water authorized to be diverted by a water right in the custodial care of the state;

(2) continue to include the priority, terms, limitations, authorized rate and quantity, and other conditions of the water right in any analysis or action conducted for the permitting, management, regulation, or administration of other water rights or applications to appropriate water;

(3) not declare the water right abandoned for the nonuse of water. Placement of the water right in the custodial care of the state shall be deemed to be due and sufficient cause for nonuse of a water right pursuant to K.S.A. 82a-718 and amendments thereto; and

(4) not dismiss the water right, unless the chief engineer determines that the geographic area in which the water right is located no longer meets the requirements of K.S.A. 2-1919(2), and amendments thereto, and reopens the area to new appropriations of water.

(b) A water right owner desiring to place a portion of an existing water right in the custodial care of the state shall request the division to divide the water right. Each portion of a divided water right shall be treated as a separate water right and administered accordingly. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(d) and K.S.A. 1999 Supp. 82a-718; effective Sept. 22, 2000.)

K.A.R. 5-5-1. Filing an application for change. (a) An application for approval to change the place of use, the point of diversion, the use made of water, or combinations thereof, filed pursuant to K.S.A. 82a-708b and amendments thereto, shall be made on a form prescribed by the chief engineer and shall include whatever information is required by the chief engineer to properly

understand the proposed change in the place of use, the point of diversion, the use made of water, or any combination of these.

(b) Before the application may be accepted for filing, the application shall be signed by at least one owner of the water right, or a duly authorized agent of an owner.

(c) Except as set forth in subsection (e), before any approval of an application can be granted, all of the water right owners, including their spouses, or a duly authorized agent of the owners of the water right, shall verify upon oath or affirmation that the statements contained in the application are true and complete.

(d) If one or more owners refuse to sign the application, or a written request is filed by one or more owners to withdraw their signatures from the application before the application is approved, the application shall be dismissed.

(e)(1) An application to change the location of a groundwater point of diversion that proposes to do only the following shall be signed by at least one owner of the approval of application or water right, or the duly authorized agent, who verifies upon oath or affirmation all of the items specified below in paragraph (e)(2):

(A) Move the location of the well 300 or fewer feet; and

(B) have the new well located on land owned by all the same owners as the owners of the original point of diversion.

(2)(A) The signer of the application for change has the authority to sign the application on behalf of all the owners.

(B) None of the ownership interests of any of the owners of the approval of application or water right will be adversely affected if the application for change is approved as filed.

(C) If the application is not approved expeditiously, there will be substantial damage to property, public health, or safety. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-708b; modified, L. 1978, ch. 460, May 1, 1978; amended Sept. 22, 2000.)

K.A.R. 5-5-2. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-708b; effective May 1, 1980; revoked May 1, 1983.)

K.A.R. 5-5-2a. Complete change application. (a) An application to change a water right pursuant to K.S.A. 82a-708b, and amendments thereto, shall be considered to be a “complete application,” if the application completely and accurately meets all of the requirements specified in this regulation and the following criteria:

- (1) The requirements specified in K.S.A. 82a-708b, and amendments thereto;
- (2) any water conservation plans required by the chief engineer pursuant to K.S.A. 82a-733, and amendments thereto;
- (3) the requirements specified in K.A.R. 5-5-1;
- (4) the requirements specified in K.A.R. 5-5-5;
- (5) the requirements specified in K.A.R. 5-3-4d;

(6) a demonstration that the proposed point of diversion meets all applicable well spacing criteria; and

(7) the requirements of K.S.A. 82a-301 through K.S.A. 82a-305a, and amendments thereto, if the proposed point of diversion, or redirection, is a dam or stream obstruction.

(b) If the applicant is requesting a waiver or exemption of a regulation pursuant to K.S.A. 82a-1904, and amendments thereto, the applicant shall submit a written request for the waiver or exemption, and documentation to support the waiver or exemption.

(c) If the proposed point of diversion is located within the boundaries of a groundwater management district, a final recommendation or an analysis of water availability has been received from the groundwater management district within the time allowed by the chief engineer concerning the approval, denial, or modification of the application.

(d) If any questions have been raised concerning whether approval of the application could cause impairment of senior water rights or prejudicially and unreasonably affect the public interest, the applicant shall submit sufficient information to resolve those questions.

(e) If any actions are required to be taken by the applicant on other approvals of applications or water rights owned by the applicant in order to make the application for change approvable, including dismissals, division agreements, reductions in water rights in accordance with K.A.R. 5-7-5, and applications for change, all necessary forms shall be completed and filed with the chief engineer.

(f) If the application involves a change in the place of use or the use made of water, the applicant shall submit all information and data necessary to ensure that the consumptive use will not be increased substantially in violation of K.A.R. 5-5-3.

(g) If the application proposed to add one or more additional wells in accordance with the provisions of K.A.R. 5-5-16, the applicant shall submit all tests, data, and information required by that regulation.

(h) If there is an issue as to whether the water right for which the change application has been filed has been abandoned in whole or in part pursuant to K.S.A. 82a-718, and amendments thereto, the applicant shall submit whatever information is necessary to resolve all abandonment issues.

(i) Each application shall be accompanied by an aerial photograph or a detailed plat with a scale of one inch equals 1,320 feet, or a U.S. geological survey topographic map with a scale of 1:24,000. The following information shall be plotted on the plat, photograph, or topographic map:

(1) The section corners;

(2) the center of the section, identified by the section number, township, and range;

(3) the actual location of the currently authorized point of diversion and the location of the proposed point of diversion indicated by appropriate symbols;

(4) the location of the place of use identified by crosshatching or by some other appropriate method;

(5) the location of all other water wells of every kind within one-half mile of the well or wells to be authorized by the proposed appropriation, each of which shall be identified by its use and the name and mailing address of the owner, if the proposed appropriation is for use of groundwater;

(6) the name and mailing address of the owner or owners of each tract of land adjacent to the stream for a distance of one-half mile upstream and one-half mile downstream from the property lines of the land owned or controlled by the applicant, if the proposed appropriation is for the use of surface water;

(7) the location of proposed or existing dams, dikes, reservoirs, canals, pipelines, powerhouses, and other structures for the purpose of storing, conveying, or using water; and

(8) a north arrow and scale.

All information shown on the photograph, plat, or map shall be legible. Black line prints may be submitted in lieu of the original drawing if a plat is submitted.

(j) The applicant shall certify on the application that all water wells of any kind located within one-half mile of the requested point of diversion have been plotted on the plat, photograph, or map attached to the application.

(k) The applicant shall submit all information and data necessary to demonstrate that the application complies with the applicable regulations adopted by the chief engineer. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a, K.S.A. 2002 Supp. 82a-708b, K.S.A. 82a-709, K.S.A. 82a-710, K.S.A. 2002 Supp. 82a-711, K.S.A. 2002 Supp. 82a-718, K.S.A. 82a-733, and K.S.A. 2002 Supp. 82a-1904; effective Oct. 24, 2003.)

K.A.R. 5-5-3. Change in consumptive use. The extent of consumptive use shall not be increased substantially after a vested right has been determined or the time allowed in which to perfect the water right has expired, including any authorized extension of time to perfect the water right. (Authorized by K.S.A. 82a-706a, 82a-708b; effective May 1, 1983.)

K.A.R. 5-5-4. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-708b; effective May 1, 1980; revoked May 1, 1981.)

K.A.R. 5-5-5. Signatures required on change applications. If more than one person is the owner of a water right, and an application is filed for a change in the place of use, point of diversion, use made of the water, or any combination thereof, only the signature(s) of the landowner(s) whose portion of the water right(s) is (are) involved in the change shall be required on the application. If the extent of each owners interest in the water right has not been legally determined, then all landowners holding an undetermined portion of the water right must sign the change application or the landowners must submit an agreement signed by all landowners agreeing

how the water right should be divided. (Authorized by K.S.A. 82a-706a, 82a-708b; effective May 1, 1980.)

K.A.R. 5-5-6. Failure to construct diversion works at authorized location. (a) If an application to appropriate water for beneficial use is approved by the chief engineer, the location of the point of diversion shall be limited to a specific tract of land and to within 300 feet of a point identified in distances measured in feet north and west from the southeast corner of the legal section.

(b) If the diversion works were not constructed at the location authorized for the point of diversion, but the appropriator can demonstrate to the satisfaction of the chief engineer that all of the following criteria have been met, the authorized location shall be corrected to the actual location of the point of diversion by a correctional order issued by the chief engineer:

- (1) The original application was filed before January 1, 1978.
- (2) The diversion works were constructed before the date the original application to appropriate water was signed.
- (3) It was not discovered that the actual diversion works were not constructed at the authorized point of diversion until after the application was approved.
- (4) The diversion works were constructed at a location that could have been approved at the time the original application was filed based on the criteria in effect at the time the original application was filed.

(c) An application for a change in point of diversion filed pursuant to K.S.A. 82a-708b and amendments thereto shall be approved by the chief engineer, authorizing the actual location where the diversion works were constructed and extending the time to construct the diversion works until the end of the calendar year in which the application to change the point of diversion was approved, if the diversion works were not constructed at the authorized location, but the appropriator can demonstrate to the satisfaction of the chief engineer that all of the following criteria have been met:

- (1) The original application was filed with the chief engineer before January 1, 1978.
- (2) The diversion works were completed after the application was filed, but within the time authorized to construct the diversion works.
- (3) The diversion works were constructed within 1,320 feet of the authorized point of diversion.
- (4) The diversion works were constructed at a location that could have been approved at the time that the original application was filed based upon the criteria in effect at the time the original application was filed.
- (5) The change application meets the other criteria of K.S.A. 82a-708b and amendments thereto.

If the actual point of diversion is within a groundwater management district, the application shall be sent to the groundwater management district board for review and recommendation.

(d) The point of diversion shall be authorized at the actual location by approval of a new application to appropriate water by the chief engineer if the diversion works were not constructed at the authorized location, but the appropriator can demonstrate to the chief engineer that all of the following criteria have been met:

- (1) The original application was filed on or after January 1, 1978.
- (2) The diversion works were subsequently completed within the time authorized to complete the diversion works.
- (3) The diversion works were constructed within 1,320 feet of the authorized point of diversion.
- (4) The time authorized to complete the diversion works has expired.
- (5) There is no water available for a new appropriation to be approved at the location of the actual point of diversion.
- (6) The application would have met all the criteria for a new application that were in effect at the time the original new application was filed.

If the actual point of diversion is within a groundwater management district, the application shall be sent to the groundwater management district board for review and recommendation. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-708b, and K.S.A. 82a-728; effective May 1, 1980; amended Sept. 22, 2000.)

K.A.R. 5-5-7. Waste of water. Each person shall not commit a waste of water as defined in these regulations. Upon a finding by the chief engineer that waste of water has occurred, the chief engineer may suspend use of that water right until the owner shows to the satisfaction of the chief engineer that the waste of water will no longer occur. (Authorized by K.S.A. 82a-706(a); implementing K.S.A. 82a-706; effective Dec. 3, 1990.)

K.A.R. 5-5-8. Standards for approval of an application for a change in the place of use and a change in the use made of water. (a) Each application for a change in the place of use or the use made of water which will materially injure or adversely affect water rights or permits to appropriate water with priorities senior to the date the application for change is filed shall not be approved by the chief engineer.

(b) Each approval of a change application shall be conditioned by the chief engineer with the terms, conditions and limitations the chief engineer deems necessary to protect the public interest and enforce the terms of K.A.R. 5-5-3.

- (c) As used in K.A.R. 5-5-3, "consumptive use" means gross diversions minus:
 - (1) waste of water, as defined in K.A.R. 5-1-1(cc); and
 - (2) return flows to the source of water supply:
 - (A) through surface water runoff which is not waste; and
 - (B) by deep percolation.

(d) The maximum annual quantity and maximum rate of diversion of water authorized by an approval of an application for a change in the use made of water shall not exceed the maximum annual quantity or maximum rate of diversion perfected at the time the application for change in the use made of water is filed with the chief engineer. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-708b; effective Nov. 28, 1994.)

K.A.R. 5-5-9. Criteria for the approval of an application for a change in the use made of water from irrigation to any other type of beneficial use of water. (a) The approval of a change in the use made of water from irrigation to any other type of beneficial use shall not be approved if it will cause the net consumptive use from the local source of water supply to be greater than the net consumptive use from the same local source of water supply by the original irrigation use based on the following criteria:

(1) The maximum annual quantity of water to be allowed by the change approval shall be the net irrigation requirement (NIR) for the 50% chance rainfall for the county of origin, as set forth in K.A.R. 5-5-12, multiplied by the maximum acreage legally irrigated under the authority of the water right in any one calendar year during the perfection period. For vested rights, the acreage used shall be the maximum acreage irrigated prior to June 28, 1945; or

(2) if the applicant establishes to the satisfaction of the chief engineer the need for more flexibility in the authorized annual quantity, the application may be approved subject to the following limits.

(A) The maximum annual quantity of water to be allowed by the change approval shall be the NIR for the 80% chance rainfall for the county of origin, as set forth in K.A.R. 5-5-12, multiplied by the maximum acreage legally irrigated in any one calendar year during the perfection period. For vested rights the acreage used shall be the maximum acreage irrigated prior to June 28, 1945.

(B) The new type of beneficial use shall be further limited by a five year fixed allocation of water in which the NIR for a 50% chance rainfall for the county of origin, as set forth in K.A.R. 5-5-12, is multiplied by five times the maximum acreage lawfully irrigated in any one calendar year during the perfection period. For vested rights, the acreage used shall be the maximum acreage irrigated prior to June 28, 1945.

(C) An application for a term permit which will circumvent the five year allocation of water limit shall not be approved by the chief engineer.

(3) In determining whether the net consumptive use of water will be increased by the proposed change in the use made of water, the applicant shall be given credit by the chief engineer for any return flows from the proposed type of beneficial use which will return to the same local source of supply as the return flows from the originally authorized type of beneficial use as substantiated by the applicant to the satisfaction of the chief engineer by an engineering report or similar type of hydrologic analysis.

(4) The authorized quantity to be changed to the new type of beneficial use shall never exceed the maximum annual quantity authorized by the water right.

(5) If a water right which overlaps the authorized place of use of one or more other water rights, either in whole or in part, is being changed to a different type of beneficial use, the total net consumptive use of all water rights after the change is approved shall not exceed the total net consumptive use of all of the rights before the change is approved.

(6) The approval for a change in the use made of water shall also be limited by that quantity reasonable for the use proposed by the change in the use made of water.

(b) Upon request of the applicant, the historic net consumptive use actually made during the perfection period, or prior to June 28, 1945 in the case of vested rights, under the water right proposed to be changed shall be considered by the chief engineer, but the burden shall be on the owner to document that historic net consumptive use with an engineering study, or an equivalent documentation and analysis, and demonstrate to the satisfaction of the chief engineer that the analysis submitted by the applicant is a more accurate estimate of the historic net consumptive use than the net consumptive use calculated using the methodology set forth in paragraph (a)(1).

(c) If the methods set forth in subsection (a) produce an authorized annual quantity of water which appears to be unrealistic and could result in impairment of other water rights, the chief engineer shall make a site-specific net consumptive use analysis to determine the quantity of water which was actually beneficially consumed under the water right. The quantity approved shall be limited to the quantity determined to be reasonable by the chief engineer's analysis. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-708b; effective Nov. 28, 1994.)

K.A.R. 5-5-10. Partial changes in the use made of water from irrigation to another type of beneficial use. (a) In a case where an irrigation right is to be divided and only a portion of the rate and quantity will be changed to a different use made of water, only that portion of the annual quantity of the water right being changed to a different type of beneficial use shall be reduced as necessary to prevent the net consumptive use from increasing substantially.

(b) The authorized place of use for the irrigation right shall generally be reduced in proportion to the reduction in annual quantity caused by the change. If the irrigator desires to retain more than his or her proportional allotment of acres after the change, the procedures outlined in K.A.R. 5-5-11(b)(2)(B)(ii) shall be followed to determine whether the irrigator shall be allowed to retain more acreage.

(c) The authorized rate of diversion shall be divided between the irrigation and the non-irrigation use. Any reasonable division of the rate by the parties shall be approved. The division of the maximum rate of diversion need not be proportional to the division of the quantity as long as the division of the rate of diversion is reasonable to divert each portion of the annual quantity of water after the division of the water right is made.

(d) The division of the annual quantity shall be made as follows:

(1) Step one.

(A) Multiply the net irrigation requirement (NIR) for the 50% chance rainfall for the county of origin, as set forth in K.A.R. 5-5-12, times the maximum number of acres irrigated in any one calendar year during the perfection period. For vested rights, the acreage used shall be the maximum acreage irrigated prior to June 28, 1945.

(B) This will result in the maximum quantity that could be changed to another type of beneficial use if the entire right were changed pursuant to K.A.R. 5-5-9(a)(1).

(2) Step two.

(A) Divide the annual quantity desired to be changed to the new use by the maximum quantity that could be changed if the entire right were changed.

(B) This will result in the percentage of the entire reduced right that will be changed to the new use. The remaining percentage of the current right can be retained by the irrigation water right owner.

(3) Step three.

(A) Multiply the remaining percentage times the total currently authorized quantity. This shall be the annual quantity of water which may be retained by the irrigation water right owner. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-708b; effective Nov. 28, 1994.)

K.A.R. 5-5-11. Applications for change in place of use for irrigation purposes. (a) For the purpose of this regulation, "base acreage" means:

(1) the maximum number of acres actually legally irrigated in any one calendar year on or before December 31, 1994 if the perfection period expired on or before December 31, 1994 or the water right is a vested right; or

(2) if the perfection period expires after December 31, 1994, and the perfection period has not expired at the time the change application has been filed, the base acreage shall be the number of acres authorized by the permit; or

(3) if the perfection period expires after December 31, 1994, and the perfection period has expired at the time the change application was filed, the base acreage shall be the maximum acreage legally irrigated in any one calendar year during the perfection period.

(4) Any year in which any of the terms, conditions and limitations of the water right or permit were violated shall not be used to determine base acreage.

(b) An application to change the authorized place of use for irrigation purposes which would permit the applicant to exceed the base acreage by 10 acres or 10 percent, whichever is less, shall not be approved by the chief engineer because it would result in a substantial increase in net consumptive use in violation of K.A.R. 5-5-3 except when one of the six following criteria are met.

(1) Identical places of use.

(A) The change application shall be filed only for the purpose of creating an identical place of use with another water right or rights;

(B) there shall not be a net increase in authorized acres;

(C) each water right involved in the proposed identical overlap in place of use shall be certified by the chief engineer prior to processing the change application if approval of the change application would authorize an increase in base acreage; and

(D) the total quantity authorized by all existing water rights and all permits involved shall be reasonable to irrigate the land authorized after the change in place of use is approved.

(2) Necessity to install more efficient irrigation system; limited acres and quantity.

(A) The change applicant shall submit information demonstrating to the satisfaction of the chief engineer that it is necessary to increase the base acreage so that a significantly more efficient irrigation delivery system may be installed. Types of crops to be grown or tillage practices used shall not be considered in deciding whether the proposed system is more efficient.

(B) If the chief engineer approves the application for a change in place of use pursuant to this subsection, the following limitations shall apply.

(i) The authorized quantity of water under the water right shall be limited to a 5 year fixed allocation, computed by dividing the net irrigation requirement (NIR), as set forth in K.A.R. 5-5-12, for the 50% chance rainfall for the county where the place of use is located, by an efficiency factor of 0.85, multiplying by the base acreage as determined in subsection (a) of this regulation, and then multiplying by 5. In any given year, the water right owner shall still be authorized to divert the maximum annual quantity authorized, provided that the 5 year allocation is not exceeded.

(ii) The maximum number of irrigated acres that shall be allowed under the proposed change in place of use shall be computed by multiplying the currently authorized annual quantity by 0.85 and dividing by the NIR, as set forth in K.A.R. 5-5-12, for the 80% chance rainfall for the county where the place of use is located.

(iii) The approval of the change shall be conditioned so that the use of water in excess of the five year allocation shall result in a two year suspension of all water use under that water right and a subsequent restriction of the authorized place of use to the base acreage at a location specifically set forth in the change approval.

(3) Necessity to install a more efficient irrigation system; limited quantity.

(A) The groundwater management district in which the point of diversion is located shall agree to assume monitoring responsibility to ensure compliance with the conditions of the change approval;

(B) the applicant shall submit information demonstrating to the satisfaction of the chief engineer that it is necessary to increase the base acreage so that a significantly more efficient irrigation delivery system may be installed;

(C) the applicant shall submit a feasible operation plan demonstrating to the satisfaction of the chief engineer that the amount of water available for appropriation under that water right is reasonable to irrigate the number of acres requested to be irrigated; and

(D) the water right owner shall have no recent pattern of water use significantly in excess of the maximum annual quantity of water authorized.

(E) If the chief engineer approves the application for a change in place of use pursuant to this subsection, the following limitations shall apply.

(i) The authorized quantity of water under the water right shall be limited to a 5-year fixed allocation, computed by dividing the net irrigation requirement (NIR), as set forth in K.A.R. 5-5-12, for the 50% chance rainfall for the county where the place of use is located by an efficiency factor of 0.85, multiplying by the base acreage irrigated as determined in subsection (a) of this regulation, and then multiplying by 5. In any given year, the water right owner shall still be authorized to divert the maximum annual quantity authorized, provided that the 5-year allocation is not exceeded.

(ii) The approval of the change shall be conditioned so that the use of water in excess of the five-year allocation shall result in a two-year suspension of all water use under that water right

and a subsequent restriction of the authorized place of use to the base acreage at a location specifically set forth in the change approval.

(4) Rotation of the irrigated land within the authorized place of use.

(A) The point of diversion is located outside a groundwater management district or the groundwater management district in which the point of diversion is located shall agree to assume monitoring responsibility to ensure compliance with the conditions of the change approval;

(B) the water right owner shall have no recent pattern of water use significantly in excess of the maximum annual quantity of water authorized; and

(C) approval of the change application shall result in a net increase in the number of acres authorized for irrigation purposes solely for the purpose of rotation of the irrigated land within the authorized place of use.

(D) If the chief engineer approves the application for a change in place of use pursuant to this subsection, the following limitations shall apply.

(i) Approval of the change application shall be limited by the chief engineer so that the net acres physically irrigated in any one calendar year after the change approval shall not exceed the base acreage; and

(ii) the approval shall be conditioned so that the use of water on more than the maximum number of acres authorized to be irrigated in any one calendar year shall result in a two-year suspension of all water use under that water right and a subsequent restriction of the authorized place of use to the base acreage at a location specifically set forth in the change approval.

(5) Specific groundwater management district regulation.

The application shall meet the criteria in a regulation adopted by the chief engineer pursuant to K.S.A. 82a-1028(o) and K.S.A. 82a-706a specifically for changes in place of use for irrigation purposes for the groundwater management district in which the point of diversion is located.

(6) No increase in historic net consumptive use.

The applicant shall demonstrate to the satisfaction of the chief engineer, with an engineering report or similar type of hydrologic analysis, that the historic net consumptive use will not be increased substantially if the proposed change in place of use is approved.

(c) If the chief engineer determines that the application cannot be approved as filed, the applicant shall be notified in writing by the chief engineer prior to denial that the change application requirements have not been met and the reason for the proposed denial.

(1) In this written notice the chief engineer shall allow the applicant 15 days to request time in which to submit additional information to show why the application should be approved.

(2) Upon written request, the applicant shall be given a reasonable time specified by the chief engineer to submit an engineering report or similar type of hydrologic analysis to show that approval of the change application will not substantially increase the historic net consumptive use.

(3) The applicant shall have the burden of demonstrating to the satisfaction of the chief engineer that approval of the change application will not cause the historic net consumptive use to be increased substantially.

(d) Whether or not the time to perfect the water right has expired, including any authorized extensions of time, the application for a change in place of use to change the size of the authorized place of use for irrigation purposes may be approved without the certificate of appropriation being issued except as provided in subsection (b)(1)(C) of this regulation.

(1) If a certificate of appropriation has not been issued, the increase in base acreage shall be determined based on reliable information.

(2) The types of acceptable information shall include, but not be limited to, field inspection reports or U.S. department of agriculture records.

(e) A flow meter meeting the specifications adopted by the chief engineer, and installed and maintained in a manner satisfactory to the chief engineer, shall be required by the chief engineer in all cases where there is an increase in the base acreage authorized to be irrigated by the approval of the change in the place of use, except when:

(1) the application for change in place of use is filed solely to create an identical place of use with other water rights; and

(2) the total quantity authorized by all existing water rights and all permits to appropriate water that are involved equals or exceeds the NIR, as set forth in K.A.R. 5-5-12, in that county for a 50% chance rainfall divided by an irrigation efficiency of 0.85. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-708b; effective Nov. 28, 1994.)

K.A.R. 5-5-12. Net irrigation requirements (NIR). The following amounts shall be used as the net irrigation requirements (NIR).

<u>County</u>	<u>50% Chance Rainfall</u>	<u>80% Chance Rainfall</u>
Allen	7.1" = 0.59'	9.9" = 0.83'
Anderson	6.1" = 0.51'	9.4" = 0.78'
Atchison	7.2" = 0.60'	10.3" = 0.86'
Barber	12.6" = 1.05'	14.6" = 1.22'
Barton	12.0" = 1.00'	14.4" = 1.20'
Bourbon	6.8" = 0.57'	9.6" = 0.80'
Brown	7.1" = 0.59'	10.6" = 0.88'
Butler	9.2" = 0.77'	12.0" = 1.00'
Chase	8.7" = 0.73'	11.4" = 0.95'
Chautauqua	8.6" = 0.72'	11.4" = 0.95'
Cherokee	7.0" = 0.58'	9.9" = 0.83'
Cheyenne	13.7" = 1.14'	15.4" = 1.28'
Clark	13.7" = 1.14'	15.7" = 1.31'
Clay	9.2" = 0.77'	12.2" = 1.02'
Cloud	10.3" = 0.86'	12.7" = 1.06'
Coffey	6.8" = 0.57'	9.9" = 0.83'
Comanche	13.0" = 1.08'	15.1" = 1.26'
Cowley	9.7" = 0.81'	12.3" = 1.03'
Crawford	7.0" = 0.58'	9.8" = 0.82'
Decatur	12.7" = 1.06'	14.8" = 1.23'

<u>County</u>	<u>50% Chance Rainfall</u>	<u>80% Chance Rainfall</u>
Dickinson	9.4" = 0.78'	12.3" = 1.03'
Doniphan	7.3" = 0.61'	10.3" = 0.86'
Douglas	6.8" = 0.57'	9.8" = 0.82'
Edwards	13.0" = 1.08'	15.1" = 1.26'
Elk	8.7" = 0.73'	11.3" = 0.94'
Ellis	12.2" = 1.02'	14.6" = 1.22'
Ellsworth	11.5" = 0.96'	13.7" = 1.14'
Finney	14.5" = 1.21'	16.3" = 1.36'
Ford	13.7" = 1.14'	15.7" = 1.31'
Franklin	5.8" = 0.48'	9.1" = 0.76'
Geary	8.4" = 0.70'	11.5" = 0.96'
Gove	13.1" = 1.09'	15.3" = 1.28'
Graham	12.4" = 1.03'	14.7" = 1.23'
Grant	14.9" = 1.24'	16.7" = 1.39'
Gray	13.8" = 1.15'	16.1" = 1.34'
Greeley	14.7" = 1.23'	16.5" = 1.38'
Greenwood	8.1" = 0.68'	11.1" = 0.93'
Hamilton	15.2" = 1.27'	16.9" = 1.41'
Harper	11.7" = 0.98'	14.0" = 1.17'
Harvey	10.2" = 0.85'	12.9" = 1.08'
Haskell	14.5" = 1.21'	16.4" = 1.37'
Hodgeman	13.4" = 1.12'	15.5" = 1.29'
Jackson	7.4" = 0.62'	10.5" = 0.88'
Jefferson	7.0" = 0.58'	10.1" = 0.84'
Jewell	10.6" = 0.88'	13.1" = 1.09'
Johnson	6.6" = 0.55'	9.5" = 0.79'
Kearny	14.9" = 1.24'	16.6" = 1.38'
Kingman	11.7" = 0.98'	14.0" = 1.17'
Kiowa	13.2" = 1.10'	15.1" = 1.26'
Labette	7.3" = 0.61'	10.3" = 0.86'
Lane	13.7" = 1.14'	15.7" = 1.31'
Leavenworth	7.0" = 0.58'	9.9" = 0.83'
Lincoln	11.3" = 0.94'	13.6" = 1.13'
Linn	5.6" = 0.47'	9.0" = 0.75'
Logan	13.9" = 1.16'	15.8" = 1.32'
Lyon	7.5" = 0.63'	10.5" = 0.88'
Marion	9.6" = 0.80'	12.2" = 1.02'
Marshall	8.7" = 0.73'	11.4" = 0.95'
McPherson	10.8" = 0.90'	13.1" = 1.09'
Meade	14.3" = 1.19'	16.1" = 1.34'
Miami	5.0" = 0.42'	9.0" = 0.75'
Mitchell	10.8" = 0.90'	13.3" = 1.11'

<u>County</u>	<u>50% Chance Rainfall</u>	<u>80% Chance Rainfall</u>
Montgomery	8.1" = 0.68'	10.9" = 0.91'
Morris	8.5" = 0.71'	11.4" = 0.95'
Morton	15.4" = 1.28'	17.1" = 1.43'
Nemaha	7.8" = 0.65'	10.9" = 0.91'
Neosho	7.1" = 0.59'	10.2" = 0.85'
Ness	13.3" = 1.11'	15.3" = 1.28'
Norton	12.3" = 1.03'	14.4" = 1.20'
Osage	7.0" = 0.58'	9.9" = 0.83'
Osborne	11.7" = 0.98'	13.8" = 1.15'
Ottawa	10.5" = 0.88'	12.9" = 1.08'
Pawnee	12.7" = 1.06'	14.9" = 1.24'
Phillips	11.7" = 0.98'	14.0" = 1.17'
Pottawatomie	8.1" = 0.68'	11.1" = 0.93'
Pratt	12.6" = 1.05'	14.6" = 1.22'
Rawlins	13.2" = 1.10'	15.1" = 1.26'
Reno	11.4" = 0.95'	13.8" = 1.15'
Republic	10.0" = 0.83'	12.6" = 1.05'
Rice	11.5" = 0.96'	13.8" = 1.15'
Riley	8.5" = 0.71'	11.4" = 0.95'
Rooks	12.0" = 1.00'	14.3" = 1.19'
Rush	12.6" = 1.05'	14.8" = 1.23'
Russell	11.3" = 0.94'	14.1" = 1.18'
Saline	10.8" = 0.90'	13.1" = 1.09'
Scott	14.0" = 1.17'	15.9" = 1.33'
Sedgwick	10.7" = 0.89'	13.1" = 1.09'
Seward	14.5" = 1.21'	16.4" = 1.37'
Shawnee	7.4" = 0.62'	10.2" = 0.85'
Sheridan	12.9" = 1.08'	15.0" = 1.25'
Sherman	14.1" = 1.18'	15.7" = 1.31'
Smith	11.4" = 0.95'	13.6" = 1.13'
Stafford	12.3" = 1.03'	14.5" = 1.21'
Stanton	15.6" = 1.30'	17.2" = 1.43'
Stevens	14.8" = 1.23'	16.8" = 1.40'
Sumner	10.3" = 0.86'	13.2" = 1.10'
Thomas	13.5" = 1.13'	15.4" = 1.28'
Trego	12.9" = 1.08'	15.0" = 1.25'
Wabaunsee	7.8" = 0.65'	10.7" = 0.89'
Wallace	14.3" = 1.19'	16.1" = 1.34'
Washington	9.2" = 0.77'	12.0" = 1.00'
Wichita	14.4" = 1.20'	16.3" = 1.36'
Wilson	8.0" = 0.67'	10.7" = 0.89'
Woodson	7.4" = 0.62'	10.4" = 0.87'

<u>County</u>	<u>50% Chance Rainfall</u>	<u>80% Chance Rainfall</u>
Wyandotte	7.0" = 0.58'	9.8" = 0.82'

(Authorized by K.S.A. 82a-706a; implementing K.S.A. 1993 Supp. 82a-708b; effective Nov. 28, 2994.)

K.A.R. 5-5-13. Relocation of alluvial wells. If an authorized point of diversion is a well that has as its source of supply an alluvium in a reach of a basin that is fully appropriated or closed to new appropriations, the approval of a change in point of diversion, and any subsequent approvals of changes in points of diversion, shall not authorize the distance between the well and the centerline of the stream to be decreased by more than 10 percent since the time the source of supply became fully appropriated or was closed to new appropriations. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-708b; effective Sept. 22, 2000.)

K.A.R. 5-5-14. Duties of owners of approvals of application and water rights. (a) All of the owners of an approval of application or a water right shall be responsible for taking all legally required actions necessary to maintain the validity of the approval of application or water right, including the filing of statutorily required fees, reports, and applications.

(b)(1) Unless the approval of application or the water right has been severed from the authorized place of use, except as set forth in paragraph (b) (2), all of the owners of the authorized place of use shall be considered to be the owners of the approval of application or the water right.

(2) Unless the chief engineer has documentation to the contrary, an approval of application or water right for municipal use shall be considered to be owned by the entity owning and operating the water distribution system. A water right for an irrigation district shall be considered to be owned by the irrigation district. (Authorized by and implementing K.S.A. 82a-706a; effective Sept. 22, 2000.)

K.A.R. 5-5-16. Additional wells. (a) An application for approval to change the point of diversion to add an additional point of diversion to divert groundwater, by either constructing a new well or moving a portion of a water right to a well that has previously been authorized by the chief engineer, shall not be approved unless it meets the following requirements:

(1) The provisions of K.S.A. 82a-708b, and amendments thereto, and any applicable regulations adopted by the chief engineer shall be met.

(2) The total maximum quantity of water authorized to be diverted each calendar year by the original well or wells, and the additional well or wells, shall not exceed any of the following limits:

(A) The maximum annual quantity of water that has been perfected;

(B) the maximum annual quantity of water authorized to be diverted before approval of the change; or

(C) the maximum consumptive use during the perfection period as required by K.A.R. 5-5-3 and as specified in either paragraph (a)(2)(C)(i) or (ii):

(i) If the water right authorizes the use of water for irrigation use, the consumptive use shall be presumed to not be increased in violation of K.A.R. 5-5-3 if the maximum annual quantity requested does not exceed the quantity in acre-feet calculated by use of the following formula: multiply the maximum number of acres legally irrigated in any one year during the perfection period

by the 80 percent chance net irrigation requirements (N.I.R.), as set forth in K.A.R. 5-5-12 expressed in acre-feet, and divide that number by a delivery efficiency of 0.85.

(ii) If the beneficial use authorized is not irrigation, the net consumptive use during the perfection period shall be determined using the best information available.

(3) The total maximum rate of diversion that may be authorized for the original well or wells and the additional well or wells shall not be greater than the total maximum rate of diversion that could have been diverted from the original well or wells if they were currently being replaced by new wells at substantially the originally authorized location or locations in the same local source of supply. A reasonable value for the maximum rate of diversion shall be one of the following:

(A) The total rate of diversion based on a current water flow rate test done on the point or points of diversion; or

(B) a value based on a valid hydraulic analysis submitted by the applicant showing the current capacity of the aquifer to yield water at the currently authorized point or points of diversion.

(4) A condition shall be placed on the approval of the application for change authorizing the additional well or wells that provides that, for the sole purpose of administering wells concerning direct impairment, the additional well or wells shall be considered to have the priority of the date the application was filed to add the additional well or wells.

(b) The applicant shall submit the following information:

(1) A well completion log of the currently authorized well or a stratigraphic log of a test hole located within 300 feet of the currently authorized well;

(2) the depth of the currently authorized well;

(3) the current depth to the static water level of the currently authorized well;

(4) a stratigraphic log of a test hole located within 300 feet of the proposed location of each of the proposed additional well or wells; and

(5) any additional information that the chief engineer needs to understand the nature of the proposed additional well or wells.

(c) The proposed additional well or wells shall meet one of the following conditions:

(1) Meet the well spacing requirements to all other wells with a priority earlier than the date the change application was filed; or

(2) if a hydraulic analysis shows that the approval of the proposed additional well within 300 feet of the currently authorized well location will neither impair any water rights senior to the date the application for change was filed nor prejudicially and unreasonably affect the public interest, be located within a 300-foot radius of one of the wells, or the geocenter if the currently authorized point of diversion is a battery of wells, authorized pursuant to the water right upon which the change application has been filed.

(d) Each point of diversion authorized by an approval of an application for change for an additional well shall have a specific assignment of a maximum instantaneous rate of diversion and a maximum annual quantity of water.

(e) Each well authorized by a water right that has been changed under the provisions of this regulation shall be equipped with a separate water flowmeter that meets or exceeds the specifications for water flowmeters adopted by the chief engineer.

(f) Each approval of an additional well or wells shall have a condition that reserves jurisdiction for the chief engineer to review the approval of the additional well or wells at intervals of no fewer than five years, and not more than 10 years, to determine if the total annual quantity of water actually being withdrawn by all wells authorized by the approval of an application for change is exceeding the total annual quantity of water that could have been physically withdrawn if the additional well or wells had not been approved. If the chief engineer determines during the review that the total annual quantity being withdrawn by all the wells, including the additional wells, exceeds the total annual quantity of water that could have been physically withdrawn by the original well or wells, the total maximum annual quantity that can be withdrawn by all the wells shall be reduced by the chief engineer to the total maximum annual quantity that could have been physically withdrawn by the original well or wells. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-708b; effective Sept. 22, 2000; amended Oct. 24, 2003.)

K.A.R. 5-6-1. Application proposing storage, contents. Any person intending to store water may make application to the chief engineer in the same manner as any other person making application for permit to appropriate water for beneficial use. The application shall set forth the same general information as any other application for permit to appropriate water for beneficial use and, in addition, shall be accompanied by information to show:

- (a) The area-capacity data of the reservoir in which the water is to be stored.
- (b) The drainage area.
- (c) The names and mailing addresses of the owners of lands that will be inundated by water accumulated in the reservoir.
- (d) Any additional information as may be required by the chief engineer for a proper understanding of the proposed appropriation and storage of water. (Authorized by K.S.A. 82a-706a; modified, L. 1978, ch. 460, May 1, 1978.)

K.A.R. 5-6-2. Storage of water in watershed district reservoirs. When a person makes application for permit to appropriate water for beneficial use proposing the storage of water in a watershed district reservoir, the application shall be accompanied by one of the following:

- (a) A copy of an agreement or letter from the board of directors of the watershed district that states it was mutually agreed and understood at the time an easement was granted by the landowner that the landowner was to have the use of space in the sediment pool to store the water to which he or she might be entitled under the water appropriation act.

(b) A copy of a resolution by the board of directors that shows, as of a certain date, the board allocated or gave to the landowner all or a specified part of the sediment pool for the storage of water in accordance with the water appropriation act. (Authorized by K.S.A. 82a-706a; modified, L. 1978, ch. 460, May 1, 1978.)

K.A.R. 5-6-3. Potential net evaporation. (a) The Kansas department of agriculture, division of water resources' map titled "potential net evaporation, in inches, for Kansas," dated September 6, 1996, is hereby adopted by reference for the purpose of determining potential net evaporation from a free water surface.

(b) The values on the map shall be used in all situations in which determination of potential net evaporation from a free water surface is necessary, including the following:

(1) Calculating the maximum annual quantity of water allowed to be appropriated for the storage of surface water in a reservoir;

(2) computing the annual amount of evaporation that will be caused by exposing the groundwater table;

(3) calculating the quantity of evaporation from surface water or exposed groundwater that will be used to determine annual water use; and

(4) determining the maximum annual quantity of water that is perfected pursuant to K.S.A. 82a-714 and amendments thereto.

(c) The values shown on the map shall be used unless the applicant provides, or the chief engineer has available, better or more site-specific data concerning potential net evaporation. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(e), K.S.A. 1999 Supp. 82a-711, and K.S.A. 1999 Supp. 82a-714; effective Sept. 22, 2000.) **(See insert, pg 87.)**

K.A.R. 5-6-4. Determination of potential annual runoff. (a) Unless the applicant for an approval of application supplies, or the chief engineer has available, better or more site-specific data, the potential annual runoff shall be determined using the following:

(1) A 20 percent chance of occurrence of runoff by extrapolating from the "annual yield of runoff" graph of the United States department of agriculture, natural resources conservation service, national engineering handbook series, part 650, engineering field handbook, EFM notice KS-38, dated December 12, 1991, which is adopted by reference; **(See insert, pg 88.)**

(2) the soil cover complex number of the drainage basin, using the "generalized soil cover complex number" map of Kansas produced by the Kansas department of agriculture, division of water resources, dated August 1999, which is hereby adopted by reference; **(See insert, pg 89.)**

(3) the normal annual precipitation in the watershed as set forth in K.A.R. 5-6-12; and

(4) the area of the watershed of the reservoir determined by using a United States geological survey 7½-minute topographic map.

(b) In computing the potential annual runoff of the watershed of the reservoir, if the quantity of water applied for, or authorized by, prior upstream surface water and groundwater applications, approvals of applications, and existing water rights within the watershed of the reservoir

will significantly decrease the potential annual runoff available for appropriation in the reservoir, the impact of those rights on the potential annual runoff shall be subtracted from the total computed potential annual runoff in order to determine the potential annual runoff available. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(e) and K.S.A. 1999 Supp. 82a-711; effective Sept. 22, 2000.)

K.A.R. 5-6-5. Maximum reasonable annual quantity for storage of water for beneficial use in a reservoir. The maximum reasonable annual quantity of water that may be authorized for appropriation by the chief engineer for diversion and storage in a reservoir shall be limited to the maximum of either of the following:

- (a) The potential annual runoff; or
- (b) the total of the following:
 - (1) A three-year supply of water to be rediverted for all authorized beneficial uses; and
 - (2) a three-year supply of water for indirect use subject to the following limitations:
 - (A) A maximum of three years of indirect use shall be authorized for each reservoir as a whole; and
 - (B) If the maximum annual quantity of water requested for rediversion exceeds the reservoir capacity, the maximum annual quantity of water authorized to be diverted and stored in any one year shall not exceed the total of the following:
 - (i) The annual quantity of water rediverted for beneficial use;
 - (ii) the reservoir capacity; and
 - (iii) one year of indirect use from the reservoir. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(e), K.S.A. 1999 Supp. 82a-711, and K.S.A. 82a-712; effective Sept. 22, 2000.)

K.A.R. 5-6-6. Initial filling and refilling of a reservoir. (a) The initial filling of a reservoir that has a capacity that exceeds the maximum annual quantity of water authorized shall be authorized by a special condition on the approval of application.

(b) Each refilling of a reservoir after the release of water for maintenance or similar reasons shall be required to be authorized by a term permit if the reservoir capacity exceeds the maximum annual quantity authorized. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(e), K.S.A. 1999 Supp. 82a-711, and K.S.A. 82a-712; effective Sept. 22, 2000.)

K.A.R. 5-6-7. Determination of average annual potential net evaporation loss. The average annual potential net evaporation loss shall be determined by multiplying the surface area of the reservoir at the top of the reservoir capacity times the value for average annual potential net evaporation, as set forth in K.A.R. 5-6-3, for the township in which the point of diversion is located. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(e), K.S.A. 1999 Supp. 82a-711, and K.S.A. 82a-712; effective Sept. 22, 2000.)

K.A.R. 5-6-8. Determination of average annual seepage loss from a reservoir. Average annual seepage loss from a reservoir shall be determined by the chief engineer based on relevant, credible information furnished by the applicant. If no relevant, credible information is supplied by the applicant, it shall be assumed by the chief engineer that there is no seepage loss. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(e), K.S.A. 1999 Supp. 82a-711, and K.S.A. 82a-712; effective Sept. 22, 2000.)

K.A.R. 5-6-9. Administration of surface water stored in a reservoir. Water lawfully stored within any reservoir authorized to store water for subsequent beneficial use shall not be subject to administration unless senior water right holders downstream of the reservoir make an appropriate request to have water bypassed to satisfy their senior water right within two weeks of the runoff event, or any other time frame in which inflow to the reservoir could reasonably have been expected to be available to the downstream senior water right if the reservoir had not impounded the water. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706b; effective Sept. 22, 2000.)

K.A.R. 5-6-10. Authorized place of use for stored surface water. The approval of application shall limit the authorized place of use to the actual location where the water will be put to beneficial use. If the authorized use is for recreational use within the reservoir only, the authorized place of use shall not exceed the size and location of the surface area of the reservoir at the elevation of the top of the principal spillway. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-711 and K.S.A. 82a-712; effective Sept. 22, 2000.)

K.A.R. 5-6-11. Reasonable rate of diversion for storage of surface water in a reservoir. Each approval of application shall limit the rate of diversion for storage of surface water in a reservoir to all natural flows not necessary to satisfy all of the following:

- (a) Senior water rights;
- (b) senior approvals of applications;
- (c) senior water reservation rights; and
- (d) senior minimum desirable stream flows pertaining to the use of water from the same source of water supply. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-712; effective Sept. 22, 2000.)

K.A.R. 5-6-12. Average annual precipitation. (a) The Kansas department of agriculture, division of water resources' map titled "normal annual precipitation, by township, 1961-1990," dated September 29, 1999, is hereby adopted by reference for the purpose of determining average annual precipitation.

(b) The data on the map shall be used in all situations in which the determination of average annual precipitation is necessary, including calculating the maximum annual quantity of water allowed to be appropriated for the storage of surface water in a reservoir.

(c) The values shown on the map shall be used unless the applicant provides, or the chief engineer has available, better or more site-specific data concerning average annual precipitation. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-711; effective Sept. 22, 2000.) **(See insert, pg 92.)**

K.A.R. 5-6-13. Water level measurement tube specifications. (a) The Kansas department of agriculture, division of water resources' document titled "specifications for water level measurement tube," dated November 5, 1999, is hereby adopted by reference.

(b) If a water level measurement tube is required by the chief engineer to be installed, the required water level measurement tube shall be installed in accordance with the specifications for water level measurement tubes adopted by the chief engineer. These requirements are in addition to those made by the Kansas department of health and environment pursuant to the groundwater exploration and protection act, K.S.A. 82a-1201 et seq., and amendments thereto.

(c) As long as the well is permitted, the water level measurement tube shall be maintained in a satisfactory condition. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706c; effective Sept. 22, 2000.) **(See insert, pgs 94 - 101.)**

K.A.R. 5-6-13a. Check valve specifications. The Kansas department of agriculture, division of water resources' document titled "check valve specifications," dated March 14, 2003, is hereby adopted by reference. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706, K.S.A. 82a-706a, and K.S.A. 82a-712; effective Oct. 24, 2003.) **(See insert, pgs 102 - 103.)**

K.A.R. 5-6-14. Irrigation with effluent from a confined feeding facility lagoon. An individual who irrigates with effluent pumped from a confined feeding facility lagoon or runoff retention pit shall not be required to have an approval of application pursuant to K.S.A. 82a-701 et seq. and amendments thereto, unless there are more than 15 acre-feet of average annual runoff meeting the following criteria:

- (1) Is generated from outside of the confined feeding facility;
- (2) is impounded in the lagoon or runoff retention pit; and
- (3) is used for irrigation purposes. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-705 and 82a-707(a); effective Sept. 22, 2000.)

K.A.R. 5-6-15. Drainage basin boundaries. (a) The following electronic data files, all dated February 14, 2002, prepared by the division of water resources, Kansas department of agriculture, using data developed by the United States geological survey and the natural resource conservation service, are hereby adopted by reference by the chief engineer for the purpose of defining the boundaries of the 62 drainage basins in Kansas: **(See insert, pg 105.)**

- (1) dwrbasins.dbf;
- (2) dwrbasins.sbn;
- (3) dwrbasins.sbx;
- (4) dwrbasins.shp; and
- (5) dwrbasins.shx.

(b) The electronic data files described in subsection (a) shall be used in all situations in which determination of the basin boundaries is necessary.

(c) The boundaries shown in the electronic data files shall be used unless the applicant provides, or the chief engineer has available, better or more site-specific data concerning the actual drainage basin boundaries. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706 and K.S.A. 82a-706a; effective Sept. 22, 2000; amended Oct. 24, 2003.)

K.A.R. 5-7-1. Due and sufficient cause for nonuse. (a) Each of the following circumstances shall be considered "due and sufficient cause", as used in K.S.A. 82a-718, and amendments thereto:

(1) Adequate moisture is provided by natural precipitation for production of crops normally requiring full or partial irrigation within the region of the state in which the place of use is located.

(2) A right has been established or is in the process of being perfected for use of water from one or more preferred sources in which a supply is available currently but is likely to be depleted during periods of drought.

(3) Water is not available from the source of water supply for the authorized use at times needed.

(4) Water use is temporarily discontinued by the owner for a definite period of time to permit soil, moisture, and water conservation, as documented by any of the following:

(A) Furnishing to the chief engineer a copy of a contract showing that land that has been lawfully irrigated with a water right that has not been abandoned is enrolled in a multiyear federal or state conservation program that has been approved by the chief engineer;

(B) enrolling the water right in the water right conservation program in accordance with K.A.R. 5-7-4; or

(C) any other method acceptable to the chief engineer that can be adequately documented by the owner before the nonuse takes place.

(5) Management and conservation practices are being applied that require the use of less water than authorized. If a conservation plan has been required by the chief engineer, the management and conservation practices used shall be consistent with the conservation plan approved by the chief engineer to qualify under this subsection.

(6) The chief engineer has previously approved the placement of the point of diversion in a standby status in accordance with K.A.R. 5-1-2.

(7) Physical problems exist with the point of diversion, distribution system, place of use, or the operator. This circumstance shall constitute due and sufficient cause only for a period of time reasonable to correct the problem.

(8) Conditions exist beyond the control of the owner that prevent access to the authorized place of use or point of diversion, as long as the owner is taking reasonable affirmative action to gain access.

(9) An alternate source of water supply was not needed and was not used because the primary source of supply was adequate to supply the needs of the water right owner. The owner shall maintain the diversion works on the alternate source of supply in a condition that will allow the owner to effectively use the alternate source of supply in a timely manner.

(10) The chief engineer determines that a manifest injustice would result if the water right were deemed abandoned under the circumstances of the case.

(b) In order to constitute due and sufficient cause for nonuse of water, the reason purporting to constitute due and sufficient cause shall have in fact prevented, or made unnecessary, the authorized beneficial use of water.

(c) Each year of nonuse for which the chief engineer finds that due and sufficient cause exists shall be considered to interrupt the successive years of nonuse for which due and sufficient cause does not exist.

(d) When a verified report of the chief engineer, or the chief engineer's authorized representative, is made a matter of record at a hearing held pursuant to K.S.A. 82a-718, and amendments thereto, that establishes nonuse of a water right for five or more successive years, the water right owner shall have the burden of showing that there have not been five or more successive years of nonuse without due and sufficient cause. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-718, modified, L. 1978, ch. 460, May 1, 1978; amended May 1, 1986; amended May 31, 1994; amended Oct. 24, 2003.)

K.A.R. 5-7-2. Waiver of hearing. The owner of a water right may waive any hearing on the questions of abandonment and termination of such right by letter to the chief engineer requesting that it be terminated and its priority forfeited. In the event of such waiver the chief engineer shall cause the termination and forfeiture of priority date to be made a matter of record in his office and shall notify the owner of the water right of his or her action by regular mail. (Authorized by K.S.A. 82a-706a; modified, L. 1978 ch. 460, May 1, 1978.)

K.A.R. 5-7-3. (Authorized by K.S.A. 82a-706a; modified, L. 1978, ch. 460, May 1, 1978; revoked May 31, 1994.)

K.A.R. 5-7-4. Water rights conservation program. (a) Enrollment in the water rights conservation program (WRCP) approved by the chief engineer, and continued compliance with the

WRCP shall constitute due and sufficient cause for nonuse pursuant to K.S.A. 82a-718, and amendments thereto, and K.A.R. 5-7-1 during the time the water right is enrolled in the WRCP.

- (b) In order to qualify for enrollment in the WRCP, the following conditions shall be met:
 - (1) The point of diversion shall be located in either of the following locations:
 - (A) In an area that is closed to new appropriations of water, except for temporary permits, term permits, and domestic use; or
 - (B) in some other area designated by the chief engineer as an area where it would be in the public interest to allow water rights to be placed in the WRCP. In areas within the boundaries of a groundwater management district, the recommendations of the board of the district shall be taken into consideration by the chief engineer.
 - (2) Each of the owners of the water right shall agree to totally suspend all water use authorized by that water right for the duration of the contract.
 - (3) The owner or owners of the water right shall sign a contract with the chief engineer, or the chief engineer's authorized representative, before placing the water right into the WRCP. The contract shall be binding on all successors in interest to the water right owner.
 - (4) Only an entire water right may be placed into the WRCP. If a portion of a water right has been abandoned, the portion that is still in good standing may be enrolled in the WRCP. If a water right is administratively divided by the chief engineer, each portion of a formally divided water right shall be considered to be an entire water right for the purpose of this regulation.
 - (A) If at least five successive years of nonuse have occurred before application for enrollment in the WRCP, a determination of whether or not that water right is subject to abandonment before entry into the program, including an analysis of any reasons given that might constitute due and sufficient cause for nonuse, shall be made by the chief engineer.
 - (B) If, after review of the information, it appears that the right has been abandoned, the statutory procedures, including the right to a hearing, shall be followed to determine whether or not it has been abandoned.
 - (5) Only the portion of a water right in good standing at the time of application for enrollment may be entered into the WRCP.

(c) Other obligations, responsibilities, and aspects of enrollment in the WRCP program shall include the following:

- (1) Water rights shall originally be placed into the WRCP for a definite period of calendar years of no fewer than five and no more than ten. The owner of the water right may apply for renewal of the contract for a period not to exceed 10 years. Applications for renewal shall be subject to the approval of the chief engineer. In determining whether or not to approve the renewal, the following factors shall be taken into account by the chief engineer:
 - (A) The hydrologic conditions in the vicinity of the point of diversion;
 - (B) the effect of renewal on the public interest; and
 - (C) any other relevant information.
- (2) The water right owner or operator shall not be required to maintain the diversion works or delivery system during the period of the WRCP contract. If the pump is removed from a well, the well shall be properly capped or sealed during the contract. These requirements are in

addition to those made by the Kansas department of health and environment pursuant to the groundwater exploration and protection act, K.S.A. 82a-1201 et seq., and amendments thereto.

(3) A certificate determining the extent to which a water right has been perfected shall be issued by the chief engineer before entering the water right into the WRCP if all of the following conditions are met:

(A) An applicant has a permit to appropriate water for beneficial use and has perfected all, or any portion, of the water right authorized by the permit.

(B) The time in which to perfect the water right has expired, including any authorized extensions of time.

(C) A field inspection has been completed.

(4) If the time to perfect the water right, or any authorized extension of it, has not expired, enrollment in the WRCP shall be considered as suspending the time to perfect. Upon expiration of the WRCP contract pertaining to this water right, the time to perfect shall again commence, and the applicant shall be required to perfect the water right within the remainder of the time allowed to perfect, or any authorized extension of that time.

(5) Each year after authorized enrollment in the WRCP, the water use correspondent shall indicate on the water use report that no water was used because the water right was enrolled in the WRCP.

(6) If the owner breaches, or causes or allows a breach of, the WRCP contract with the chief engineer, each year of nonuse between the effective date of the contract and the date of the breach shall be counted as years of non use without due and sufficient cause for the purpose of determining whether or not the water right has been abandoned pursuant to the provisions of K.S.A. 82a-718, and amendments thereto. Before this penalty is imposed, the owner shall be given an opportunity to show either of the following:

(A) A breach of contract did not occur.

(B) A breach occurred, but either was minor or has been cured, and should not constitute grounds for imposing the penalty. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706, K.S.A. 82a-713, K.S.A. 1999 Supp. 82a-714, and K.S.A. 1999 Supp. 82a-718; effective July 1, 1994; amended Sept. 22, 2000.)

K.A.R. 5-7-4a. Conservation reserve program. (a) Enrollment of all, or part of, the authorized place of use in the conservation reserve program (CRP) shall not be considered good cause to extend the time to construct the diversion works.

(b) If an authorized place of use has been placed into the CRP after the diversion works have been completed but before the time to perfect the water right has expired, the appropriator may request and receive an extension of time to perfect the water right for the length of time that the authorized place of use is enrolled in the CRP program, plus the length of time remaining to perfect the water right, if all of the following conditions are met:

(1) The diversion works were properly completed within the time allowed by the approval of application.

(2) The time to perfect the water right as set forth in the approval of the application has not expired at the time the request for the extension is filed.

(3) The appropriator furnishes the chief engineer with a copy of the CRP contract, including the aerial photograph designating which land has been placed into the CRP program. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-713 and K.S.A. 1999 Supp. 82a-714; effective Sept. 22, 2000.)

K.A.R. 5-7-5. Reduction of an existing water right. (a) In order to have an approval of application or water right reduced, the water right owner may file, at any time, a request to reduce any of the following:

- (1) The authorized maximum annual quantity of water;
- (2) the authorized maximum rate of diversion;
- (3) the authorized place of use;
- (4) the authorized points of diversion;
- (5) the types of beneficial use; or
- (6) any combination of paragraphs (a)(1) through (a)(5).

(b) The request to reduce a water right shall be filed on a form prescribed by the chief engineer.

(c) The request to reduce shall be submitted in proper form and shall include the following information:

(1) Except as set forth in subsection (d) below, notarized signatures of all water right owners that would be required by K.A.R. 5-5-1 to sign an application for change under K.S.A. 82a-708b and amendments thereto;

(2) a clear description of which portion or portions of the approval of application or water right are proposed to remain;

(3) a statement that all of the owners of the approval of application or water right are waiving any right they might have to a hearing concerning the dismissal or abandonment of any portion of the approval of application or water right that they are requesting to have removed; and

(4) any other information requested by the chief engineer.

(d) A request solely to reduce the authorized place of use that will not affect the approval of application or water right in any other way shall be only required to be signed only by all of the owners of the authorized place of use that is proposed to be deleted.

(e) A reasonable request to reduce an approval of application or water right that is submitted in proper form shall be approved by the chief engineer unless it will cause the impairment of existing water rights or prejudicially and unreasonably affect the public interest. If the request to reduce the water right or approval of application is to remove a point of diversion, the approval shall reduce only that maximum annual quantity of water and maximum rate of diversion associated with the authorized point of diversion that is removed.

(f) A request to reduce an existing water right shall not be considered to be an application for a change pursuant to K.S.A. 82a-708b and amendments thereto, so no application fee shall be

required. (Authorized by K.S.A.82a-706a; implementing K.S.A.82a-706 and 82a-721; effective Sept. 22, 2000.)

K.A.R. 5-8-1. Certification of a water right. Prior to the issuance of a certificate of appropriation by the chief engineer pursuant to an application under which water has been applied to the land of more than one owner, these landowners shall be allowed an opportunity to submit to the chief engineer an agreement signed by all landowners involved recommending how the water right should be divided among them. (Authorized by K.S.A. 82a-706a, 82a-714; effective May 1, 1980.)

K.A.R. 5-8-2. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-712, 82a-714; effective May 1, 1980; revoked May 1, 1981.)

K.A.R. 5-8-3. Perfection; multiple water rights. (a) The total maximum annual quantity of water that can be perfected by all water rights authorized to divert water to the same authorized place of use, shall be limited to the maximum quantity of water actually physically and legally diverted and applied to beneficial use on the common authorized place of use during any one calendar year during the perfection period for the water right being certified.

(b) The junior water right shall be limited by means of a limitation clause in the certificate so that the authorized annual quantity of water for the junior water right, when combined with all senior water rights authorized to apply water to beneficial use on the common authorized place of use, does not exceed either of the following standards:

(1) The annual quantity of water reasonable for the type of beneficial use made of the water; and

(2) the total annual quantity of water legally diverted by all water rights to the common authorized place of use during any one calendar year during the perfection period of the junior water right.

(c) The limitation clause on the junior water right being certified shall not restrict the total annual quantity authorized to be diverted to the authorized place of use to less than the total annual quantity of water authorized by the senior water right or water rights for beneficial use on the common authorized place of use.

(d) The owner whose water right is being certified shall be sent a draft certificate showing the maximum rate of diversion and maximum annual quantity of water that are being proposed for the certificate. The water right owner shall be given a reasonable time period of no fewer than 30 days to comment on the draft certificate and to provide any additional information concerning the water diverted and applied to beneficial use on the authorized place of use during the perfection period in accordance with the terms, conditions, and limitations of the approval of application, and all other water rights and approvals of applications authorized to divert water to the common authorized place of use.

(e) In certifying a water right with a priority date before the effective date of this regulation, the provisions of subsection (a) shall be followed to the extent possible. If sufficient information is not available to make the determination described in subsection (a), the best information available shall be utilized by the chief engineer to determine the quantity of water applied to the authorized place of use during any one calendar year during the perfection period under the authority of the approval of application being certified and all other water rights. The standard set forth in paragraph (b)(1) shall be applied, even if sufficient information is not available to make the determination described in subsection (a). (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(e), K.S.A. 82a-713, and K.S.A. 1999 Supp. 82a-714(a); effective Sept. 22, 2000.)

K.A.R. 5-8-4. Construction of diversion works. (a) A reasonable period of time for construction of diversion works shall be not less than one full year following the approval of the application to appropriate water. If a person demonstrates that a reasonable long-term schedule for development of diversion works or other infrastructure is in the public interest, that information shall be taken into consideration by the chief engineer in determining a reasonable period of time for the construction of diversion works.

(b) For good cause shown by the applicant, a reasonable extension of time to construct the diversion works shall be allowed by the chief engineer, if the request for extension is filed pursuant to the requirements of K.A.R. 5-3-7 and is accompanied by the statutorily required filing fee.

(c) If the total time allowed to construct the diversion works has been more than 16 months and fewer than 24 months, an extension of time shall be granted by the chief engineer only if the applicant meets the following criteria:

- (1) Demonstrates good cause;
- (2) provides a copy of a contract with the well driller or other information substantiating the intent to proceed to complete the construction of the diversion works in an expeditious manner;
- (3) files the request for extension pursuant to the requirements of K.A.R. 5-3-7; and
- (4) submits the statutorily required filing fee.

(d) If the total time allowed to construct the diversion works equals or exceeds 24 months, an extension of time may be granted only if the applicant demonstrates to the chief engineer that circumstances beyond the control of the applicant necessitate the extension of time.

(e)(1) The applicant shall file a notice of completion of diversion works and the statutorily required field inspection fee with the chief engineer no later than March 1 following the deadline to construct the diversion works. The notice of completion of diversion works shall be filed on a form prescribed by the chief engineer.

(2) If a water flowmeter has been required by the chief engineer as a condition of the permit, the applicant shall also file a notice of completion of installation of a water flowmeter on a form prescribed by the chief engineer. This form shall be due at the same time that the notice of completion of diversion works form is due.

(f)(1) The applicant shall be sent a notice by the chief engineer giving the applicant 30 days to show that the diversion works were completed within the time allowed in accordance with the terms, conditions, and limitations of the approval of application and to pay the field inspection fee, if it has not already been paid, under either of the following conditions:

(A) A notice of completion of diversion works has not been completely and timely filed with the chief engineer.

(B) Information on file in the office of the chief engineer indicates that the diversion works were not properly constructed within the time allowed to construct the diversion works, including any authorized extensions of time.

(2) The permit shall be dismissed and its priority forfeited if the applicant fails to perform the following:

(A) To demonstrate that the diversion works were completed within the time allowed by the approval of application; and

(B) to pay the statutorily required field inspection fee, if it has not already been paid. (Authorized by K.S.A. 82a-706a; implementing K.S.A.82a-712, K.S.A. 82a-713, and K.S.A. 1999 Supp. 82a-714; effective Sept. 22, 2000.)

K.A.R. 5-8-6. Perfection of a water right. (a) Except for municipal use, a reasonable period of time to perfect a water right shall be no fewer than four full calendar years following the deadline for construction of the diversion works. If the time to construct the diversion works is extended, the perfection period shall be extended to no fewer than four full calendar years beyond the final deadline to construct the diversion works, unless the owner of the approval of application objects.

(b) A reasonable time to perfect a water right for municipal use shall be no fewer than 20 full calendar years plus the remainder of the calendar year in which the application was approved. Each holder of a permit for municipal use of water shall submit a progress report to the chief engineer 10 full calendar years after the permit was issued. The report shall be submitted on a form prescribed by the chief engineer. The report shall meet the following conditions:

(1) Compare the annual water use projected in the original application with the actual annual water use for the prior 10 years; and

(2) document compliance with an approved conservation plan, if one had been required. If the 10-year review by the chief engineer shows that actual annual water use is significantly less than originally projected, the holder shall revise the estimated annual water use for the next 10 years. If it is in the public interest, the total authorized annual quantity of water for the next 10 years shall be reduced by the chief engineer to a reasonable annual quantity based on the municipal user's revised estimates of annual water use for the next 10 years. If the 10-year review indicates that a required conservation plan was not being complied with or that the conservation plan does not meet the Kansas water office's conservation guidelines for municipal users, as in effect at the time of the review, an order requiring any of the following shall be issued by the chief engineer:

(A) That the conservation plan be amended to comply with current guidelines;

(B) that the user comply with the provisions of the approved conservation plan; or

(C) both of the requirements in paragraphs (b) (2) (A) and (B).

(c) If the applicant demonstrates to the chief engineer that a longer perfection period is necessary to justify purchase or construction of infrastructure related to the diversion, treatment, or distribution of water that actually is being built, the original time to perfect a water right for municipal use or other public entity, including a utility, may be extended for a period not to exceed a total time to perfect of 40 years.

(d) For good cause shown by the applicant, a reasonable extension of time to perfect a water right shall be allowed by the chief engineer if the request for extension is filed pursuant to the terms of K.A.R. 5-3-7 and is accompanied by the statutorily required filing fee.

(e) If water use reports and other information on file in the office of the chief engineer indicate that no water was applied to the authorized beneficial use during the time allowed to perfect the water right, including any authorized extensions of time, the owner of the approval of application as shown in the records of the chief engineer shall be sent a notice by the chief engineer, giving the owner 30 days to show that water was put to beneficial use within the terms, conditions, and limitations of the permit during the perfection period. If the owner fails to demonstrate that water was so used, the permit shall be dismissed and its priority forfeited. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-707(e), K.S.A. 82a-712, K.S.A. 82a-713, and K.S.A. 1999 Supp. 82a-714; effective Sept. 22, 2000.)

K.A.R. 5-8-7. Extensions of time to perfect a water right. (a) For all beneficial uses of water, except municipal use, the total time to perfect the water right, including extensions of time, shall not exceed 10 years after the calendar year in which the diversion works were required to be completed unless one or more of the following “extenuating circumstances” exist.

(b) “Extenuating circumstances” shall include the following:

(1) Circumstances beyond the control of the owner of the approval of application that have unduly restricted the owner’s ability to perfect the water right;

(2) actions or omissions by the chief engineer that make it necessary to extend the time to perfect; and

(3) for applications with a priority before May 1, 1978, the unavailability or lack of credibility of records of water use, crops grown, and the number and location of acres actually irrigated, and other relevant information during the perfection period, but other records or information is available for a period after the perfection period and would reasonably represent the application of water to beneficial use in accordance with the terms, conditions, and limitations of the permit.

(c) The burden shall be on the owner of the approval of application to document the extenuating circumstances described in subsection (b) and justify to the chief engineer the need for the extension of time to perfect the water right.

(d)(1) Extensions of time to perfect for applications with a priority before May 1, 1978, may be granted in any reasonable increment of years. The total amount of time allowed to perfect the water right shall be reasonable.

(2) Extensions of time to perfect a water right for nonmunicipal use, with a priority on or after May 1, 1978, may be granted in any increment of time until the total time to perfect equals 10 years. After the total time allowed to perfect the water right equals 10 years, extensions of time shall be granted in one-year increments only.

(e) Extensions of the time to perfect a water right for municipal use of water that can be justified shall be extended in five-year increments or less after the original 20-year time period to perfect the water right has elapsed. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-712 and 82a-713; effective Sept. 22, 2000.)

K.A.R. 5-8-8. Owner required to allow chief engineer to conduct timely field inspection for certification. (a) In order to allow the chief engineer to conduct a timely field inspection to certify a water right, the owner of an approval of application shall perform the following:

(1) Operate the diversion works in the same manner that they were operated when water was applied to beneficial use during the perfection period, so that an accurate rate-of-diversion test can be conducted by the chief engineer;

(2) allow the chief engineer access to the diversion works and the authorized place of use for the purpose of making the field inspection; and

(3) allow, cooperate with, and assist the chief engineer in any other ways necessary for the chief engineer to conduct the field inspection.

(b) The owner of the approval of application shall allow the field inspection to be conducted within 365 days after the chief engineer has sent the owner of the approval of application a restricted letter requesting that the chief engineer be allowed to conduct a field inspection. If the owner does not cooperate with, assist, and allow the chief engineer to conduct a field inspection, without good cause, within one year after the restricted letter is sent by the chief engineer, an order shall be issued by the chief engineer requiring the owner of the approval of application to comply with the terms of the restricted letter. The order shall also be sent by restricted mail. If the owner fails to comply with the order of the chief engineer, an action shall be brought by the chief engineer to enforce the order of the chief engineer pursuant to the act for judicial review, and civil enforcement of agency actions, K.S.A. 77-624 et seq. and amendments thereto. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-714; effective Sept. 22, 2000.)

K.A.R. 5-9-1. Application for temporary permit acceptable for filing. To be acceptable for filing, an application for temporary permit to appropriate water for beneficial use shall meet the following requirements:

(a) Be made on the form prescribed by the chief engineer;

(b) be signed by the applicant or an authorized representative of the applicant;

- (c) be accompanied by the statutory application fee;
- (d) contain all the information requested for the proposed use as set forth in the prescribed application form; and
- (e) include any other information requested by the chief engineer that is necessary to understand the application. (Authorized by and implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-727; effective May 1, 1979; amended Oct. 24, 2003.)

K.A.R. 5-9-2. Priority. Upon receipt in the office of the chief engineer of an acceptable application for temporary permit to appropriate water, accompanied by the statutory application fee, a stamp showing the date and time of receipt shall be placed on the application form. The date and time of receipt of the application shall establish the priority to the use of the water. The priority shall terminate on the date when use of water will be discontinued as set forth in the application or any authorized extension of time thereof. (Authorized by K.S.A. 82a-727; effective May 1, 1979.)

K.A.R. 5-9-3. Quantity. A temporary permit shall not be granted for a quantity in excess of 1,000,000 gallons except for dewatering purposes or when water is to be diverted from a source located on a construction site and used on the construction site in connection with a project that the chief engineer has approved under the authority of K.S.A. 82a-301 through 305a or K.S.A. 24-126. (Authorized by K.S.A. 82a-727(b); implementing K.S.A. 82a-727; effective May 1, 1979; amended December 3, 1990.)

K.A.R. 5-9-4. Place of use limitation. A temporary permit shall not be granted for more than one place of use. (Authorized by K.S.A. 82a-727; effective May 1, 1979.)

K.A.R. 5-9-5. Point of diversion limitation. A temporary permit shall not be granted authorizing more than one point of diversion from any source of supply. (Authorized by K.S.A. 82a-727; effective May 1, 1979.)

K.A.R. 5-9-6. Approval of application. The approval of an application for a temporary permit shall be by endorsement on the application by the chief engineer. The endorsement shall set forth the terms, limitations, and conditions necessary for the protection of the public interest. (Authorized by and implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-727; effective May 1, 1979; amended Oct. 24, 2003.)

K.A.R. 5-9-7. Extension of time. For good cause shown by the applicant the chief engineer may grant an extension of time to continue the use of water under a temporary permit beyond the date authorized as shown in the approval of the application. The term of a temporary permit shall not exceed six (6) months including any authorized extension of time thereof. (Authorized by K.S.A. 82a-727; effective May 1, 1979.)

K.A.R. 5-9-8. Ownership. A temporary permit for the appropriation of water shall not be transferable. (Authorized by K.S.A. 82a-727; effective May 1, 1979.)

K.A.R. 5-9-9. Reserved.

K.A.R. 5-9-10. Application fee for a temporary permit. The fee for an application for a temporary permit or extension of a temporary permit shall be twenty-five dollars (\$25.00). This regulation shall be effective on and after September 1, 1982. (Authorized by and implementing K.S.A. 1982 Supp. 82a-727; effective, T-83-25, Sep. 1, 1982; effective May 1, 1983.)

K.A.R. 5-9-11. Documentation of access to source of water supply for temporary permit. Before approval of a temporary permit, the applicant shall show that permission for access to the source of water supply has been obtained from the landowner or landowners of the property where the proposed point of diversion will be located. If permission is granted in an oil and gas lease, it shall be sufficient for the applicant to indicate this on the application for a temporary permit to appropriate water. If the water is to be obtained from land not covered by the oil and gas lease, then the permission of the landowner or landowners shall be adequately documented. (Authorized by and implementing K.S.A. 82a-727; effective Sept. 22, 2000.)

K.A.R. 5-10-1. (Authorized by K.S.A. 82a-706a, K.S.A. 1982 Supp. 82a-708a; implementing K.S.A. 1982 Supp. 82a-708a; effective, T-83-25, Sep. 1, 1982; effective May 1, 1983; revoked May 1, 1988.)

K.A.R. 5-10-2. (Authorized by K.S.A. 82a-706a, K.S.A. 1982 Supp. 82a-708a; implementing K.S.A. 1982 Supp. 82a-708a; effective, T-83-25, Sep. 1, 1982; effective May 1, 1983; revoked May 1, 1988.)

K.A.R. 5-10-3. (Authorized by K.S.A. 82a-706a, K.S.A. 1982 Supp. 82a-708b; implementing K.S.A. 1982 Supp. 82a-708b; effective, T-83-25, Sep. 1, 1982; effective May 1, 1983; revoked May 1, 1988.)

K.A.R. 5-10-4. Waiver or exemptions. The chief engineer may grant an exemption or waiver from any regulation adopted by the chief engineer if it is shown that the granting of such exemption or waiver will not prejudicially nor unreasonably affect the public interest and that it will not impair an existing water right. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-711, 82a-712; effective May 1, 1983.)

K.A.R. 5-10-5. Administration of water use among vested right holders. If, during the administration of water rights, each appropriation right and approved permit to appropriate water for beneficial use has been regulated in accordance with the provisions of K.S.A. 82a-706b, the division of water resources shall administer the water available from that source of supply among the holders who have active vested rights, including vested rights for domestic purposes, on a proportional basis and in a manner which will provide, if possible, sufficient flow in the stream for vested rights for

domestic purposes. The proportionment may be accomplished by a pro rata reduction in the rate or quantity that each vested right shall be allowed to divert, by setting up a rotation system or by any other equitable method. Vested rights shall be administered in this manner unless they have been adjudicated by a court of competent jurisdiction as to priority or rotation and then the chief engineer shall administer them in accordance with the order of the court. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-704a and K.S.A. 82a-706; effective May 1, 1986.)

K.A.R. 5-10-6. Procedure for determination of an active vested domestic water right.

The existence of an active domestic vested water right shall be determined by the chief engineer as follows:

(a) Information shall be filed with the chief engineer on a form prescribed by the chief engineer concerning the dates beneficial use of water was made, and the nature and extent of the active domestic vested right.

(b) Affidavits from at least three competent disinterested persons shall be filed by the claimant on a form prescribed by the chief engineer or other reliable substantiating evidence shall be submitted to the chief engineer by the claimant documenting the dates beneficial use of water was made, and the nature and extent of the active domestic vested right.

(c) Within a reasonable time, the staff of the division of water resources shall investigate the information submitted.

(d) Notice.

(1) Written notice of the claim shall be sent by the chief engineer to all water right owners of record in the office of the chief engineer with an authorized point of diversion within one-half mile of the claimed point of diversion.

(2) In addition, one notice in a newspaper with general circulation in the county in which the point of diversion is located shall be published by the chief engineer. Such published notice shall contain:

(A) the name of the claimant;

(B) the location of the claimed point of diversion; and

(C) a declaration that it is a claim for a domestic vested right.

(3) All notices shall be given at least 14 days prior to the close of the record.

(e) A copy of the chief engineer's draft order determining the active domestic vested water right and any comments received in response to the notices shall be furnished to the claimant by the chief engineer or the chief engineer's authorized representative.

(f) The claimant shall be given thirty days from the date the chief engineer mails the draft to the claimant in which to submit additional information, request a hearing concerning the determination, or both.

(g) If a hearing is requested by the claimant in a timely manner, or the chief engineer deems it to be in the public interest to do so, a hearing shall be held by the chief engineer, or the chief engineer's authorized representative, within a reasonable time.

(h) The chief engineer shall issue the order determining whether the claimed active vested domestic right exists and, if so, determining the nature and extent of that right.

(i) The order determining the active vested domestic right shall be made a matter of record in the office of the chief engineer. In addition, a copy of the order shall be furnished to the claimant by the chief engineer, with instructions that it shall be filed with the register of deeds in the county in which the point of diversion is located.

(j) All vested domestic water rights shall be assumed to have a priority of June 28, 1945 until they have been adjudicated by a court of competent jurisdiction. Vested domestic rights shall be administered in accordance with K.A.R. 5-10-5. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-705a; effective Nov. 28, 1994.)

K.A.R. 5-12-1. Aquifer storage and recovery permitting. (a) An operator may store water in an aquifer storage and recovery system under a permit to appropriate water for artificial recharge if the water appropriated is source water. The requirements of article 12 of the rules and regulations adopted by the Kansas department of agriculture, division of water resources are in addition to any requirements of the Kansas department of health and environment concerning underground injection wells, including article 46 of the rules and regulations adopted by the Kansas department of health and environment.

(b) Each application for a permit to appropriate water for artificial recharge shall describe the horizontal and vertical extent of the basin storage area in which the source water will be stored.

(1) The horizontal extent shall be determined by a closed boundary within which the recharge system used to store the water will be physically located. The recharge system may include recharge pits, recharge trenches, recharge wells, or other similar systems that cause source water to enter the storage volume of the basin storage area, either by gravity flow or by injection. The basin storage area may be subdivided into smaller areas representative of the areas that may be recharged by the individual recharge systems.

(2) The vertical extent shall be defined by a minimum and a maximum index water level for the basin recharge storage area, or for each subdivided area within the basin storage area if the basin storage area is subdivided. The minimum index water level shall be the lowest water level within the basin storage area, or smaller subdivided area if the basin storage area is subdivided, that occurred within the 10 years before the filing of the application for a permit to appropriate water, or a period of time longer than 10 years demonstrated by the applicant to reflect the lowest water level. If the basin storage area is subdivided, measurements from the same year shall be used to determine the minimum index water level for each subdivision. The maximum index water level shall represent the maximum storage potential for the basin storage area.

(c) An application for a permit to appropriate water for artificial recharge shall set forth the maximum annual quantity and maximum rate of diversion of source water.

(d)(1) Each application for a permit to appropriate water for artificial recharge shall include a methodology for accounting for water stored in a basin storage area both on an annual basis and on a cumulative basis so that recharge credits can be calculated. If more than one application for a permit to appropriate water for artificial recharge relates to the same aquifer storage and recovery system, each application shall use the same methodology for accounting for water stored in the basin storage area. The accounting of the water balance of all water entering and leaving the basin storage area shall be determined by using sound engineering methods based on actual measurements, generally accepted engineering methodology, or a combination of both.

(2) Approval of any application for a permit to appropriate water for artificial recharge shall be contingent upon the chief engineer's approval of the method for accounting for the basin storage area.

(e) An applicant for recovery of water stored by the holder of a permit to appropriate water for artificial recharge to store water in a basin storage area shall obtain a permit separate from the aquifer storage permit to appropriate water for beneficial use for each well used to recover the water stored. The maximum annual quantity of water that may be appropriated for this purpose shall be no more than the maximum cumulative recharge credits available to the operator of the aquifer storage and recovery system. These credits shall be determined by the accounting methodology approved under a permit to appropriate water for artificial recharge pertaining to the aquifer storage and recovery system. In determining whether diversion of the annual quantity impairs other water rights, the following data may be considered by the chief engineer:

- (1) The maximum storage volume available in the basin storage area;
- (2) the spatial distribution of recharge and withdrawal systems;
- (3) the maximum rate of diversion at which the water will be withdrawn; and
- (4) any other relevant information.

Recharge credits may be accumulated over more than one year, and any amount of recharge credits available may be withdrawn in accordance with the permit if the withdrawal does not impair other water rights.

(f) The approval of application, if the water to be diverted is the water artificially recharged into the basin storage area, shall be conditioned upon the following:

- (1) Generally accepted engineering methodology;
- (2) a maximum annual quantity that does not exceed the recharge credits; and
- (3) an annual reporting that complies with K.A.R. 5-12-2. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-711 and K.S.A. 82a-712; effective Sept. 22, 2000.)

K.A.R. 5-12-2. Aquifer storage and recovery accounting. (a) In addition to annual water use reporting requirements pursuant to K.S.A. 82a-732, and amendments thereto, on June 1 of each year the permit holder of an aquifer storage or recovery system shall report an accounting of water in the basin storage area to the chief engineer and to any groundwater management district identified

in subsection (c) of this regulation. The annual report for the preceding calendar year shall account for all water entering and leaving the basin storage area and shall specifically compute the amount of recharge credits held in the basin storage area.

(b) The report shall be in the form prescribed by the chief engineer and shall address the items in the water balance for the basin storage area, which may include the following amounts:

- (1) Natural and artificial recharge;
- (2) groundwater inflow and outflow;
- (3) evaporation and transpiration;
- (4) groundwater water diversions from all nondomestic wells;
- (5) infiltration from streams;
- (6) groundwater discharge to streams;
- (7) the calculated recharge credits; and
- (8) any other information that in the opinion of the chief engineer is pertinent to the basin storage and surrounding areas.

The annual accounting shall specifically take into account the amounts of natural recharge, artificial recharge, groundwater inflow, groundwater outflow, evapotranspiration, and groundwater pumpage. Groundwater pumpage shall include recharge credits withdrawn as well as pumpage from all nondomestic wells in the basin storage area. The annual accounting shall include any additional items within a basin storage area that would be necessary to determine the amount of recharge credit available for recovery.

(c) If any part of the basin storage area is within the boundaries of a groundwater management district, the permit holder of any aquifer storage or recovery system shall furnish a copy of the annual report to the district board for comments by June 1 of each year.

(d) If a groundwater management district receives an annual report, the district may provide comments to the chief engineer if the comments are submitted to the chief engineer within 30 days of the district's receipt of the report identified in subsection (c) of this regulation.

(e) The permit holder may be required by the chief engineer to submit additional information pertinent to the system. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-711 and K.S.A. 82a-712; effective Sept. 22, 2000.)

K.A.R. 5-12-3. Hearings. (a) A hearing shall be held by the chief engineer in the general vicinity where an applicant proposes aquifer storage and recovery before approval of any such application for aquifer storage and recovery.

(b) If any part of a proposed basin storage area is within the boundaries of a groundwater management district, the hearing required by subsection (a) of this regulation shall be held within the groundwater management district. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-711 and K.S.A. 82a-712; effective Sept. 22, 2000.)

K.A.R. 5-12-4. Aquifer storage and recovery systems in a groundwater management district. A groundwater management district may recommend rules and regulations pertaining to monitoring and accounting requirements for that portion of the basin storage area that falls within the district's boundaries. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-711, K.S.A. 82a-712, and K.S.A. 82a-1028(o); effective Sept. 22, 2000.)

K.A.R. 5-13-1. Notice of intent to open or expand a sand and gravel pit operation. Each operator desiring to open or expand a sand and gravel pit operation shall file a notice of intent to open or expand a sand and gravel pit operation on a form prescribed by the chief engineer before opening or expanding the sand and gravel pit operation.

The following information shall be included on the form:

- (a) The legal description of the sand and gravel pit operation;
- (b) the date the project began or will begin;
- (c) the number of acres of the groundwater table that will be exposed by the project at the time active mining ceases;
- (d) a legal description and a map showing the location of the groundwater that will be exposed at the time active mining ceases;
- (e) the year the pit excavation is estimated to be completed;
- (f) measures that will be used to protect the area groundwater supply from pollution; and
- (g) any other pertinent information that may be required by the chief engineer to understand the nature of the proposed project and to ensure that the provisions of K.S.A. 82a-734, and amendments thereto, and any regulations promulgated thereunder, are being complied with. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-721 and K.S.A. 82a-734; effective Sept. 22, 2000.)

K.A.R. 5-13-2. Determination of "substantially adverse impact on the area groundwater supply." (a) A sand and gravel operation shall be deemed to cause a "substantially adverse impact on the area groundwater supply," as provided in K.S.A. 82a-734 (b) and amendments thereto, if the sand and gravel pit operation is opened or expanded after the effective date of this regulation in any township that has an average annual potential net evaporation greater than 18 inches per year as determined from K.A.R. 5-6-3.

(b) In any township that has an average annual potential net evaporation of 18 or fewer inches per year, as determined from K.A.R. 5-6-3, the opening or expansion of a sand and gravel pit operation, shall be deemed to not cause a "substantially adverse impact on the area groundwater

supply,” as provided in K.S.A. 82a-734 and amendments thereto, unless the chief engineer can demonstrate that the project will cause one or more of the following:

- (1) A direct impairment to a groundwater approval of application or water right;
- (2) an unreasonable deterioration of the groundwater quality;
- (3) an unreasonable raising or lowering of the static water level; or
- (4) prevention of any waters of the state from moving to a person having a prior right to use these waters. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-721 and K.S.A. 82a-734; effective Sept. 22, 2000.)

K.A.R. 5-13-3. Determination of when groundwater evaporation is a beneficial use.

On and after the effective date of this regulation, whenever the opening or expansion of a sand and gravel operation is considered to cause a substantially adverse impact on the area groundwater supply pursuant to K.A.R. 5-13-2, the evaporation caused shall be considered to be a beneficial use, and the operator shall be required to receive an approval of application, or approval of an application for change, pursuant to K.S.A. 82a-701 et seq. and amendments thereto, before exposing the groundwater table to evaporation. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-711, K.S.A. 82a-721, and K.S.A. 82a-734; effective Sept. 22, 2000.)

K.A.R. 5-13-4. Exemption. (a) To the extent that groundwater evaporation causes a substantially adverse impact to the area groundwater supply pursuant to K.A.R. 5-13-2, a new application to appropriate the groundwater evaporation caused by the project shall be exempt from meeting the safe yield, allowable appropriation, or similar types of regulations adopted by the chief engineer. This exemption shall be granted if the operator meets all of the criteria in subsection (b) because exempting the quantity of water that has been, or will be, evaporated by exposing the groundwater table beneath the proven reserves will not prejudicially and unreasonably affect the public interest and will not impair any existing water right.

(b) Except as set forth in subsection (e), in order to qualify for this exemption, the operator shall show that on December 31, 1999, all of the following conditions were met:

- (1) The operator had an active, existing sand and gravel mining operation.
- (2) If required, the operator had a valid surface-mining license issued pursuant to the surface-mining land conservation and reclamation act, K.S.A. 49-601 et seq., and amendments thereto.
- (3) If required, the operator had made a timely application for a hydraulic dredging permit or had received a hydraulic dredging permit issued pursuant to the Kansas water appropriation act.
- (4) The operator had filed the water use reports required by, and paid any civil fines assessed by the chief engineer pursuant to K.S.A. 82a-732, and amendments thereto.
- (5) The operator had paid the water protection fees required by K.S.A. 82a-954, and amendments thereto.
- (6) To the extent necessary to physically operate, the operator had acquired all local permits and local zoning approvals.
- (7) The operator had purchased, leased, or otherwise acquired legal control over proven sand and gravel reserves.

(8) The operator had filed an application to appropriate water or filed a notice of intent to open or expand a sand and gravel pit operation with the chief engineer when required by K.S.A. 82a-734(a), and amendments thereto.

(c) It shall be the burden of the operator to show that the operator meets the requirements of subsection (b) by filing the necessary information or documentation with the chief engineer on or before December 31, 2001. An extension of time may be granted by the chief engineer for good cause if the request for extension of time is filed by the operator with the chief engineer before December 31, 2001.

(d) To the extent that the operator meets the requirements of subsection (b) above, an application to appropriate water for evaporation of the groundwater caused by exposing the groundwater table shall be exempt from complying with safe yield, allowable appropriation, and similar types of regulations adopted by the chief engineer. This exemption shall apply to all the evaporation caused by exposing the groundwater table up to the areal extent of the proven reserves that existed on December 31, 1999.

(e) If, on the effective date of this regulation, an operator was in the process of establishing a replacement operation for an active, existing sand and gravel pit operation, an exemption shall be allowed by the chief engineer for the proposed replacement operation according to subsection (d) on terms, conditions and limitations that will neither cause impairment of existing water rights nor prejudicially and unreasonably affect the public interest if all of the following criteria are met:

(1) The proposed replacement sand and gravel operation is located outside the boundaries of all groundwater management districts and intensive groundwater use control areas.

(2) The geocenter of the proposed replacement operation is located within two miles of the geocenter of the existing, active operation.

(3) The proposed replacement operation met the provisions of paragraphs (b)(1) through (b)(6) of this regulation on December 31, 1999.

(4) The proposed replacement project meets the requirements of paragraphs (b) (7) and (8) on the effective date of this regulation. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-721, K.S.A. 1999 Supp. 82a-1904, and K.S.A. 82a-734; effective Sept. 22, 2000.)

K.A.R. 5-13-5. Approval of pit operations that are opened or expanded after the effective date of this regulation. Except as set forth in K.A.R. 5-13-4, pit operations that are excavated or expanded after the effective date of this regulation and that have a substantial adverse impact on the area groundwater supply shall meet one of the following conditions:

(a) Receive prior approval of the chief engineer for a new permit to appropriate an annual quantity of water sufficient to offset the evaporation caused by exposing the groundwater table in a manner described in K.A.R. 5-13-7;

(b) acquire existing water rights and receive approval of the chief engineer to change the point of diversion, place of use, and the use made of water to authorize the water rights to be used for the project in a manner described in K.A.R. 5-13-7;

(c) acquire and take out of production sufficient water rights in the manner described in K.A.R. 5-13-7 to offset the net average annual evaporation caused by exposing the groundwater table; or

(d) any combination of the above. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-721 and K.S.A. 82a-734; effective Sept. 22, 2000.)

K.A.R. 5-13-6. Determination of the maximum rate of diversion and annual quantity of water. The annual quantity of water, in acre-feet, required to be appropriated for evaporation caused by exposing the area groundwater table shall be determined by multiplying the exposed groundwater surface area of the project in acres by the potential net evaporation in inches, for Kansas, as found in K.A.R. 5-6-3, and dividing by 12. The rate of diversion shall be the natural rate of evaporation. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-721 and K.S.A. 82a-734; effective Sept. 22, 2000.)

K.A.R. 5-13-7. Offsets for evaporation of groundwater. The net average annual quantity of groundwater evaporation shall be authorized, accounted for, or offset in one or more of the following ways:

(a) An approval of application or water right currently authorizes the use of water at that pit location.

(b) A new approval of application authorizes the use of water at that pit location.

(c) Acceptable quality surface water that is legally and physically available for groundwater recharge is authorized to be diverted into the proposed project.

(d) Both of the following conditions are met:

(1) Water is made available by acquiring all, or a portion of, an existing water right to any of the following:

(A) Use surface water or groundwater, or both, that is hydraulically connected to a stream channel aquifer in which the project is located;

(B) use groundwater from an unconsolidated regional aquifer that is within a two-mile radius of the geocenter of the project that is the same unconsolidated regional aquifer in which the project is located, or a hydraulically connected aquifer; or

(C) use groundwater from an unconsolidated regional aquifer that is within a 3.5 mile radius of the geocenter of the project and is the same unconsolidated regional aquifer in which the project is located, or a hydraulically connected aquifer, if the operator can demonstrate to the chief engineer that sufficient water rights to offset the evaporation caused by the project cannot be acquired

within a two-mile radius of the geocenter of the project after making reasonable and prudent efforts to find both proven reserves and water rights.

(2) The applicant demonstrates to the chief engineer that the acquired water right, or portion of it, will no longer be exercised by any of the following:

- (A) Placing it in the custodial care of the state;
- (B) placing it in a perpetual trust approved by the chief engineer; or
- (C) restricting its future use in some other way that the chief engineer determines to be adequate to ensure that it will no longer be exercised.

(e) Diffused surface water is diverted into the project from inside a berm surrounding the project built to prevent unacceptable quality surface water from entering the groundwater table. The average annual amount of runoff shall be determined from a map titled "figure 12. -- mean annual runoff in Kansas," dated June 1982, published by the Kansas water office and hereby adopted by reference, unless the applicant demonstrates to the chief engineer, or the chief engineer has, better, more site-specific data. **(See insert, pg 126.)**

(f) Any other water credit or offset that the chief engineer determines will adequately offset the groundwater evaporation caused by the pit operation. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-721 and K.S.A. 82a-734; effective Sept. 22, 2000.)

K.A.R. 5-13-8. Offset calculations. All of the following requirements shall apply with respect to an offset water right described in K.A.R. 5-13-7(d): (a) No physical diversion of the offset water right shall be required or allowed.

(b) The project shall receive credit for 100 percent of the net consumptive use of the water right used as an offset.

(c) Credit for acquisition of an existing surface water right shall be given for an equivalent quantity of water that is legally and physically available within the terms, conditions, and limitations of the surface water right at the location of the groundwater pit. The quantity of water available at the groundwater pit from the acquired surface water right shall be calculated by taking into account the following:

- (1) Stream gains;
- (2) stream losses;
- (3) transit losses;
- (4) water supplied from intervening tributaries; and
- (5) water needed to satisfy senior surface water rights to the same source of supply.

(d) Credit for acquisition of a groundwater right with a point of diversion located in the same stream channel aquifer as the groundwater pit shall be given for either of the following:

- (1) A groundwater right located within a two-mile radius of the groundwater pit; or
- (2) a groundwater right in the same source of water supply with a point of diversion located more than two miles up gradient of the geocenter of the groundwater pit for the quantity of

water legally and physically available under that groundwater right at its original point of diversion, minus the transit loss between the original groundwater point of diversion and the geocenter of the proposed pit. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-721 and K.S.A. 82a-734; effective Sept. 22, 2000.)

K.A.R. 5-13-9. Easements and covenants. The applicant shall provide any easements or covenants, attached to or running with the land, that are necessary to document that the offset water acquired pursuant to K.A.R. 5-13-7 will continue to be legally available to offset the evaporation of groundwater. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-721 and K.S.A. 82a-734; effective Sept. 22, 2000.)

K.A.R. 5-13-10. Time to construct the diversion works for a sand and gravel pit operation. (a) As used in this regulation, “completion of diversion works” means that both of the following have occurred:

(1) All equipment necessary to begin to operate a sand and gravel operation, including the hydraulic dredge, has been installed.

(2) Sufficient overburden has been excavated to begin to expose the groundwater to evaporation.

(b) A reasonable time to construct the diversion works for a sand and gravel pit operation shall be not less than one full year following the approval of the application to appropriate water.

(c) For good cause shown by the applicant, a reasonable extension of time to construct the diversion works shall be allowed by the chief engineer if both of the following conditions are met:

(1) The request for extension is filed pursuant to the requirements of K.A.R. 5-3-7.

(2) The request for extension is accompanied by the statutorily required filing fee. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-712 and 82a-713; effective Sept. 22, 2000.)

K.A.R. 5-13-11. Time to perfect a water right for evaporation of groundwater. (a) A reasonable time to perfect a water right for evaporation of groundwater caused by a sand and gravel pit operation shall be neither less than five calendar years plus the remainder of the calendar year in which the application was approved, nor more than 20 years plus the remainder of the calendar year in which the application was approved.

(b)(1) For good cause shown by the applicant, a reasonable extension of the time to perfect the water right shall be allowed by the chief engineer if both of the following conditions are met:

(A) The request is timely filed pursuant to the terms of K.A.R. 5-3-7.

(B) The request is accompanied by the statutorily required filing fee.

(2) The total time to perfect a water right shall not exceed 40 years. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-713; effective Sept. 22, 2000.)

K.A.R. 5-14-1. Enforcement. (a) Except as set forth in subsection (i), the procedure set forth below shall be followed whenever enforcement action is taken by the chief engineer after becoming aware that a person may be performing any of the following:

- (1) Violating any provision of K.S.A. 82a-701 et seq., and amendments thereto;
- (2) violating any provision of a regulation adopted pursuant to that act; or
- (3) violating a term, condition, or limitation of an approval of application or water right.

(b) The alleged violation shall be investigated by the chief engineer.

(c) A written report of the investigation shall be prepared by the chief engineer. This report shall include any documents regarding the matter that were relied upon or prepared by the chief engineer. This report shall be made a part of the official record of the chief engineer. If an approval of application or a water right is involved, the report shall be made an official part of that file.

(d)(1) If the investigation shows that no violation has occurred or that enforcement action is not warranted, no further enforcement action shall be taken at that time.

(2) If the investigation determines that a violation has occurred, an order shall be issued by the chief engineer. The owner or owners of the approval of application or water right, as shown in the records of the chief engineer, shall be served by delivering a copy in person or sending a copy of the order by restricted mail. The order shall specify the following:

- (A) What the violation is;
- (B) what actions are necessary to correct the violation;
- (C) what a reasonable time is in order to correct the violation. Extensions of time to correct a violation may be granted by the chief engineer if good cause is shown by the violator or owner;
- (D) that the order will become effective immediately; and
- (E) that a hearing may be requested within 15 days of the issuance of the order. The request for a hearing may include a request for a stay of the order. If the person shows good cause why a stay should be granted, a stay may be granted by the chief engineer.

(e) If the violation is corrected within the time specified by the chief engineer, the violator shall notify the chief engineer. An inspection shall be conducted by the chief engineer to determine if the violation has been corrected. If the violation has been corrected, the diversion of water may continue within the terms, conditions, and limitations of the approval of application or water right.

(f) If the violation is not corrected within the time specified by the chief engineer, an order requiring that unauthorized or illegal diversion of water cease until the violation is corrected shall be issued by the chief engineer.

(g) If the violator ceases diversion of water and then corrects the violation, the violator shall notify the chief engineer when the violation is corrected. The diversion works and the authorized place of use, as appropriate, shall be inspected by the chief engineer to determine if the violation has

been corrected. If the chief engineer determines that the violation has been corrected, the order prohibiting diversion of water shall be rescinded by the chief engineer as soon as possible. When the owner or violator receives notice from the chief engineer that the order prohibiting the diversion of water has been rescinded, the diversion of water may recommence.

(h)(1) Any of the actions listed in paragraph (h)(2) may be taken by the chief engineer if the violator performs any of the following acts and fails to cease the diversion of water as ordered by the chief engineer:

- (A) Violates any provision of K.S.A. 82a-701 et seq., and amendments thereto;
 - (B) violates any provision of a regulation adopted pursuant to that act; or
 - (C) violates a term, condition, or limitation of an approval of application or a water right.
- (2) If the violator performs any act listed in paragraph (h)(1), any of the following actions

may be taken by the chief engineer:

- (A) Bring an action to enforce the orders of the chief engineer pursuant to the act for judicial review and civil enforcement of agency actions, K.S.A. 77-624 et seq., and amendments thereto;
- (B) request the attorney general to bring an action in the name of the state of Kansas;
- (C) request that criminal proceedings be brought pursuant to K.S.A. 82a-728, and amendments thereto;
- (D) enter into a consent order with the violator specifying the remedial actions that shall be taken by the violator;
- (E) take any other legally permissible enforcement action; or
- (F) any combination of the above actions.

(i) The provisions of this regulation shall not apply to any actions taken by the chief engineer pursuant to K.S.A. 82a-706b, and amendments thereto, to enforce water right priorities and to prevent direct impairment by either of the following:

- (1) Junior water rights; or
- (2) illegal diversions of water.

(j) After the violator has been issued an order as specified in subsection (f), the violator may request an administrative hearing before the chief engineer in accordance with the provisions of K.A.R. 5-14-2. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706, 82a-706b, 82a-706d, and 82a-728; effective Sept. 22, 2000.)

K.A.R. 5-14-2. Request for conference hearing. (a) Each written request for a hearing of an order issued by the chief engineer according to K.A.R. 5-14-1 shall be served on the chief engineer within 15 days of the issuance of the order. The request for a hearing may include a request for a stay of the order. If the requester demonstrates good cause for a stay to the chief engineer, a stay of the order may be granted by the chief engineer.

(b) If a request for a hearing is not served on the chief engineer within 15 days after the order is issued by the chief engineer, the order shall become a final agency action as defined by K.S.A. 77-607, and amendments thereto.

(c) If a request for a hearing is filed with the chief engineer within 15 days of the issuance of an order, a conference adjudicative hearing shall be held by the chief engineer.

(d) A conference hearing shall be an informal proceeding conducted according to the following criteria:

- (1) The hearing officer shall regulate the course of a conference proceeding.
- (2) Only parties may testify and present written exhibits.
- (3) Only parties may offer comments on the issues.
- (4) The hearing officer may conduct all or part of the hearing by telephone, or other electronic means, if each participant in the hearing has the opportunity to participate in the entire proceeding while it is taking place.
- (5) The hearing shall be recorded at the agency's expense.
- (6) Any party, at the party's expense and subject to any reasonable conditions that the chief engineer may establish, may cause a person other than the chief engineer to prepare a transcript from the chief engineer's recording or cause additional recordings to be made during the hearing.

(e) After the conference adjudicative hearing, or completion of a full adjudicative hearing if the conference hearing was converted to a full hearing, a final agency action, as defined by K.S.A. 77-607, and amendments thereto, shall be issued by the chief engineer. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706 and K.S.A. 82a-706b; effective Sept. 22, 2000.)

K.A.R. 5-14-3. Administrative appeal to the secretary of agriculture. (a) Except as set forth in subsection (f), a summary order shall be issued by the chief engineer in accordance with the provisions of K.S.A. 77-537 through 77-542, and amendments thereto, for the following types of actions:

- (1) Approval or rejection of an application to change the place of use, the point of diversion, the use made of water, or any combination, filed pursuant to K.S.A. 82a-708b, and amendments thereto;
- (2) approval of an application as filed, approval of a smaller maximum annual quantity of water than requested, approval with conditions necessary to protect the public interest, or disapproval of an application to appropriate water for beneficial use filed pursuant to K.S.A. 82a-711, and amendments thereto; and
- (3) abandonment and termination of a water right pursuant to K.S.A. 82a-718, and amendments thereto.

(b) If a request for a hearing is not filed with the chief engineer within 15 days after issuance of the summary order by the chief engineer, the order shall become final.

(c) If a request for a hearing is filed with the chief engineer within 15 days, a conference adjudicative hearing shall be held by the chief engineer in accordance with the provisions of K.S.A. 77-533 through K.S.A. 77-535, and amendments thereto.

(d) After the conference adjudicative hearing, an initial order shall be issued by the chief engineer in accordance with the provisions of K.S.A. 77-526, and amendments thereto.

(e) A petition for review of the initial order shall be filed with the secretary of agriculture in accordance with the provisions of K.S.A. 77-527, and amendments thereto, within 15 days of the issuance of the initial order by the chief engineer.

(f) A hearing may be held by the chief engineer in accordance with K.A.R. 5-3-4a before processing a new application to appropriate water if the chief engineer determines that one of the following conditions exists:

(1) It is in the public interest.

(2) A person demonstrates to the chief engineer that approval of the application may cause impairment of senior approvals of applications or water rights.

If the chief engineer holds a hearing before processing a new application to appropriate water, an initial order shall be issued by the chief engineer. A petition for review of the initial order shall be filed in accordance with the provisions of subsection (e) of this regulation. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-708b, K.S.A. 82a-709, K.S.A. 1999 Supp. 82a-711, K.S.A. 1999 Supp. 82a-718, K.S.A. 1999 Supp. 82a-1038, and K.S.A. 1999 Supp. 82a-1901; effective Sept. 22, 2000.)

K.A.R. 5-14-4. Appeal of the failure of the chief engineer to timely issue a certificate of appropriation. (a) The time period specified in K.S.A. 82a-714(c), and amendments thereto, shall begin when the time authorized to perfect the water right, including any authorized extensions of time, expires.

(b) If the chief engineer fails to issue a certificate of appropriation within the time limit specified by K.S.A. 82a-714(c) and amendments thereto, the water right owner may file a request for review with the secretary of agriculture pursuant to K.S.A. 82a-1901, and amendments thereto, within 15 days of the expiration of the time period specified in K.S.A. 82a-714(c) and amendments thereto. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-714 and K.S.A. 1999 Supp. 82a-1901; effective Sept. 22, 2000.)

K.A.R. 5-14-5. Conditions of a request for a conference hearing. (a) Any request for a conference hearing before the chief engineer shall meet the following conditions:

(1) Be in writing and be served on the chief engineer within 15 days of the issuance of the summary order;

(2) clearly admit, deny, or explain each of the findings of facts and conclusions of law in the summary order;

- (3) identify any facts and conclusions of law that the person disputes and intends to place at issue; and
- (4) state any other defenses and the bases for those defenses.

(b) If the person states that the person has no knowledge of a particular factual allegation, that allegation shall be deemed denied in the request. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706 and K.S.A. 82a-706b; effective Sept. 22, 2000.)

K.A.R. 5-14-6. Informal settlement. At any time during the proceedings conducted under K.A.R. 5-14-2, K.A.R. 5-14-3, or K.A.R. 5-14-4, the alleged violator may request a settlement conference. The request shall be in writing and shall be served on the chief engineer on behalf of the alleged violator. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 1999 Supp. 82a-1901; effective Sept. 22, 2000.)

K.A.R. 5-14-7. Conversion of a conference hearing. (a) At any point during a conference hearing being conducted according to K.A.R. 5-14-2, the conference hearing may be converted by the chief engineer to a full adjudicative hearing to be heard by the chief engineer.

(b) The conversion of a conference hearing to a full adjudicative hearing may be effected only upon providing notice to all parties to the original proceedings.

(c) The record of the conference hearing may be used in the full adjudicative hearing.

(d) After a conference hearing is converted to a full adjudicative hearing, the hearing officer shall perform the following:

(1) Give any additional notice to parties or other persons necessary to satisfy the requirements of a full adjudicative hearing; and

(2) conduct any additional proceedings necessary to satisfy the requirements of a full adjudicative hearing.

(e) If the conference hearing is converted to a full adjudicative hearing, the full adjudicative hearing shall be conducted according to the following criteria:

(1) The hearing officer shall regulate the course of the proceedings.

(2) The parties may testify and present exhibits.

(3) The hearing officer may allow nonparties an opportunity to present oral or written statements and exhibits.

(4) All testimony shall be given under oath.

(5) To the extent necessary for full disclosure of all relevant facts and issues, the hearing officer shall afford to all parties the opportunity to respond, present evidence and arguments, conduct cross-examination, and submit rebuttal evidence.

(6) The hearing officer may conduct all or part of the hearing by telephone or other electronic means, if each party in the hearing has an opportunity to participate in the entire proceeding while it is taking place.

- (7) The hearing shall be recorded at the agency's expense.
- (8) Any party, at that party's expense and subject to any reasonable conditions that the state agency may establish, may cause a person other than the state agency to prepare a transcript from the state agency's recording or cause additional recordings to be made during the hearing. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706 and 82a-706b; effective Sept. 22, 2000.)

K.A.R. 5-14-10. Civil penalties; suspension or modification of water rights. (a) In addition to any other authorized enforcement procedures, if the chief engineer finds that any of the violations specified in K.S.A. 82a-737, and amendments thereto, have occurred, a written order shall be issued by the chief engineer stating the following:

- (1) The nature of the violation;
- (2) the factual basis for the violation;
- (3) the civil penalty, suspension, modification of a water right or use of water, or any combination of these, to be imposed; and
- (4) the appropriate procedure for appeal pursuant to K.S.A. 82a-1901, and amendments thereto.

(b) The categories of offenses specified in subsections (c), (d), and (e) shall be applied when assessing the civil penalty for each violation. Each day on which the violation continues to occur may constitute a separate offense.

- (c)(1) Each category 1 offense shall result in a civil penalty of \$100.
- (2) Category 1 offenses shall include the following:
 - (A) A threat to divert water without authorization from the chief engineer;
 - (B) irrigating an unauthorized place of use that is 10 acres or less;
 - (C) diversion of water at a rate in excess of the authorized rate of diversion, but less than 115 percent of the authorized rate of diversion;
 - (D) maintaining a water flowmeter or other water-measuring device required by the chief engineer that is out of compliance as specified by K.A.R. 5-1-9; and
 - (E) violation of any other condition on a water right or approval of application not specified anywhere else in this regulation.

- (d)(1) Each category 2 offense shall result in a civil penalty of \$500.
- (2) Category 2 offenses shall include the following:
 - (A) Diverting water from an unauthorized point of diversion of water;
 - (B) irrigating an unauthorized place of use that is more than 10 acres;
 - (C) failure to properly implement a conservation plan required by the chief engineer;
 - (D) committing a waste of water;
 - (E) diversion of water at a rate that equals or exceeds 115 percent of the authorized rate of diversion;
 - (F) failure to install a water flowmeter or other acceptable water-measuring device;

(G) failure to promptly provide complete and accurate water use or other data, information, or records requested by the chief engineer, except the annual water use reports required by K.S.A. 82a-732, and amendments thereto;

(H) diversion of water in excess of the authorized quantity of water; and

(I) applying water to an unauthorized type of beneficial use.

(e)(1) Each category 3 offense shall result in a civil penalty of \$1,000.

(2) Category 3 offenses shall include the following:

(A) Tampering with a water flowmeter or other acceptable water-measuring device;

(B) causing a water flowmeter or other acceptable water-measuring device to show an incorrect reading by any method, including any of the following:

(i) Altering the propeller;

(ii) reversing the water flowmeter; or

(iii) running the water flowmeter in reverse by any means;

(C) failing to timely install or removing a required water flowmeter or other acceptable water-measuring device;

(D) falsifying water use or other data required by the chief engineer;

(E) denying authorized personnel of the chief engineer access as required by K.S.A. 82a-706b, and amendments thereto;

(F) violating a cease and desist order issued by the chief engineer; and

(G) violating an order of the chief engineer issued pursuant to K.S.A. 82a-706b and amendments thereto.

(f) The civil penalties specified in paragraph (c)(1) may be increased if the chief engineer finds that aggravating circumstances exist. The civil penalties specified in paragraph (d)(1) may be increased or decreased if the chief engineer finds that aggravating or extenuating circumstances exist. The civil penalties specified in paragraph (e)(1) may be decreased if the chief engineer finds that extenuating circumstances exist. Extenuating circumstances and aggravating circumstances shall include the following:

(1) Prior violations;

(2) intentional noncompliance or gross negligence; and

(3) failure to correct the violation upon discovery or notification by the chief engineer.

(g) In addition to the assessment of a civil penalty or any other penalty provided for by law, any water right may be modified or suspended by the chief engineer upon the issuance of a written order finding a violation as established in subsection (a). Except as otherwise specified by regulation, violation of either a multiyear annual allocation or a condition limiting the net acres that may be irrigated in any one calendar year pursuant to an approval to allow annual rotation of the authorized place of use for irrigation shall result in the following:

(1) A two-year suspension of all water use authorized by the water right, any term permit, and any water right upon which the multiyear allocation or rotation was based;

(2) a subsequent restriction of the authorized place of use to the base acreage at a location specifically set forth in the change approval; and

(3) after any suspension has expired, a reversion to all conditions in effect on the water right before approval of the change application authorizing the multiyear allocation or rotation.

In all other cases, the term of the suspension or modification shall be determined by the chief engineer based upon the circumstances set forth in subsection (f).

(h) Any person aggrieved by an order of the chief engineer may request a review pursuant to K.S.A. 82a-1901, and amendments thereto, and after exhaustion of administrative remedies, may appeal to the district court in the manner provided by the act for judicial review and civil enforcement of agency actions. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a, K.S.A. 2002 Supp. 82a-737, and K.S.A. 2002 Supp. 82a-1901; effective Oct. 24, 2003.)

K.A.R. 5-14-11. Civil fines; water use reporting. (a) Each owner of a water right or approval of application who fails to perform either of the following shall be assessed a civil penalty of \$250 for each water right or approval of application that is not timely filed or that is materially incomplete or inaccurate:

(1) Timely submit an annual water use report pursuant to K.S.A. 82a-732, and amendments thereto; or

(2) submit a complete and accurate water use report as required by K.S.A. 82a-732, and amendments thereto.

(b) If the owner submits both the complete and accurate water use report and payment of the civil penalty after March 1 but before June 1, the civil penalty per water right or approval of application shall be reduced to \$50 for each water right or approval of application. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 82a-732; effective Oct. 24, 2003.)

K.A.R. 5-15-1. Administration of minimum desirable streamflow. (a) Except as specified in subsection (d), if the streamflow at a minimum desirable streamflow (MDS) gaging station falls below the streamflow established in K.S.A. 82a-703c, and amendments thereto, for a period of seven consecutive days, a determination of whether the following conditions have been met shall be made by the chief engineer:

(1) The actual daily average streamflow at the gage has been less than the streamflow trigger value set by K.A.R. 5-15-4.

(2) If an alluvial aquifer has a significant effect on streamflow, the static groundwater level in the alluvial aquifer above the gage is insufficient to maintain MDS in the stream.

(b) Whenever the chief engineer determines that MDS administration should occur according to subsection (d) or because the conditions specified in paragraphs (a)(1) and (2) have both been met, water rights and approvals of applications with a priority after April 12, 1984 shall be administered in order of priority as necessary to protect the appropriate minimum desirable streamflow specified in K.S.A. 82a-703c, and amendments thereto. Owners of record in the office of the chief engineer of water rights and approvals of applications that are being administered shall be notified by the chief engineer that water rights and approvals of applications are being administered

to protect MDS. This notification shall be made by certified mail, personal notice, or other verifiable means.

(c) After administration to protect MDS has begun, no person that has received notice according to subsection (b) may divert water under the authority of a water right or approval of application with a priority after April 12, 1984, unless one of the following conditions is met:

(1) The owner of the water right or approval of application has entered into an annual MDS consent order with the chief engineer in accordance with the provisions of K.A.R. 5-15-2 and is diverting water in accordance with the terms of that MDS consent order.

(2) The chief engineer has determined, in accordance with the provisions of K.A.R. 5-15-3, that administration of water rights and approvals of applications with a priority after April 12, 1984 is no longer necessary to protect MDS and has notified the owners by certified mail, personal notice, or other verifiable means that diversions may continue in accordance with the terms, conditions, and limitations of the water right or approval of application.

(d) If the streamflow at an MDS gaging station falls below the level established in K.S.A. 82a-703c, and amendments thereto, for a period of seven consecutive days and no streamflow trigger value has been set for an MDS gaging station in K.A.R. 5-15-4, a determination of whether and when MDS administration will begin and how it should occur shall be made by the chief engineer, based on the following factors:

- (1) The general hydrologic conditions affecting streamflow in the stream reach;
- (2) the magnitude and duration of recent streamflows;
- (3) the extent to which groundwater contributes to streamflow;
- (4) the effects of drought on streamflow;
- (5) the existence and effect of relevant water management agreements;
- (6) the magnitude of the effect that the administration of water rights with priorities junior to the MDS values would have on the streamflow; and
- (7) the effect of reservoir operations.

This regulation shall be effective on and after August 27, 2002. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-703a, 82a-703b, and 82a-703c; effective, T-5-4-29-02, April 29, 2002; effective Aug. 27, 2002.)

K.A.R. 5-15-2. Minimum desirable streamflow consent orders. (a) An annual minimum desirable streamflow (MDS) consent order according to K.A.R. 5-15-1(c)(1) may be entered into by the chief engineer and the owner of the water right or approval of application to divert surface water. This consent order shall contain the following provisions:

(1) Whenever the chief engineer has determined that the administration of water rights and approvals of applications to divert surface water with a priority after April 12, 1984 is necessary to protect the minimum desirable streamflow set by K.S.A. 82a-703c, and amendments thereto, water shall not be diverted under the authority of these water rights or approval of applications unless the owner has been notified by the chief engineer by certified mail, personal notice, or other verifiable means that either of the following conditions has been met:

(A)(i) The chief engineer has determined that the average daily streamflow has been, or is likely to be, at or above the temporary surface water diversion threshold for a period of time specified in K.A.R. 5-15-4 or set by the chief engineer according to K.A.R. 5-15-1(d); and

(ii) the chief engineer has determined that water is available to be diverted during that time period under the priority of water rights or approval of applications with a priority after April 12, 1984 without impairing senior water rights or senior water reservation rights.

(B) The chief engineer has determined that it is no longer necessary to administer water rights and approval of applications to protect the minimum desirable streamflow set by K.S.A. 82a-703c, and amendments thereto.

(2) The owner of the water right or approval of application shall properly install and maintain a water flowmeter on all points of diversion authorized by the water rights or approval of applications in accordance with regulations adopted by the chief engineer.

(3) The water right owner agrees that failure to abide by either of the following will result in the suspension of the water right or approval of application pursuant to K.S.A. 82a-737, and amendments thereto, for the remainder of the calendar year, and any other enforcement actions that may be authorized by law:

(A) The terms of the MDS consent order; or

(B) the terms, conditions, and limitations of the water right or approval of application.

(4) The water right owner agrees to comply with any other provisions that the chief engineer determines are necessary to prevent impairment, protect MDS values, and protect the public interest.

(b) If the chief engineer determines that hydrologic conditions indicate that some groundwater will be available to be pumped in the basin during the next water-use season or year by water rights or approval of applications with a priority after April 12, 1984, the owner of the water right or approval of application may enter into an annual MDS consent order pursuant to K.A.R. 5-15-1(c)(1) to divert groundwater, upon approval of the chief engineer. This consent order shall contain the following provisions:

(1) Whenever the chief engineer has determined that the administration of water rights and approval of applications to divert groundwater with a priority after April 12, 1984 is necessary to protect minimum desirable streamflows set by K.S.A. 82a-703c, and amendments thereto, groundwater shall not be diverted under the authority of the water right or approval of application unless the owner has been notified by the chief engineer by certified mail, personal notice, or other verifiable means that one of the following conditions has been met:

(A) During MDS administration during that calendar year, the owner is authorized to divert, pursuant to the owner's water right or approval of application, a quantity of water not to exceed that quantity of water set forth in K.A.R. 5-15-4 as the well pumping allowance.

(B) The chief engineer has determined that it is no longer necessary to administer water rights and approvals of applications to protect the minimum desirable streamflows set by K.S.A. 82a-703c, and amendments thereto.

(2) The owner of the water right or approval of application shall properly install and maintain a water flowmeter on all points of diversion authorized by the water right or approval of application in accordance with regulations adopted by the chief engineer.

(3) The total quantity of water authorized to be diverted under the water right or approval of application during a calendar year shall not exceed the annual quantity of water authorized.

(4) The water right owner agrees that failure to abide by either of the following will result in the suspension of the water right or approval of application for the remainder of the calendar year, and any other enforcement actions that may be authorized by law:

(A) The terms of the MDS consent order; or

(B) the terms, conditions, and limitations of the water right or approval of application.

(5) The water right owner agrees to comply with any other provisions that the chief engineer determines are necessary to prevent impairment, protect MDS values, and protect the public interest.

This regulation shall be effective on and after August 27, 2002. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-703a, 82a-703b, and 82a-703c, and K.S.A. 2001 Supp. 82a-737; effective, T-5-4-29-02, April 29, 2002; effective Aug. 27, 2002.)

K.A.R. 5-15-3. Cessation of minimum desirable streamflow administration. (a) Except as specified in subsection (c), whenever the chief engineer determines that both of the conditions specified in subsection (b) have been met, the administration of water rights and approvals of applications with a priority after April 12, 1984 to protect minimum desirable streamflows pursuant to K.S.A. 82a-703c, and amendments thereto, shall be declared by the chief engineer to be no longer necessary. The owners of those water rights and approvals of applications shall be notified by the chief engineer by certified mail, personal notice, or other verifiable means that the owners may recommence diverting water in accordance with the terms, conditions, and limitations of their water rights or approvals of applications.

(b)(1) The streamflows at the minimum desirable streamflow (MDS) gage have exceeded the streamflows established by K.S.A. 82a-703c, and amendments thereto, for a period of 14 consecutive days.

(2) If a significant alluvial aquifer exists, the average static water level in the alluvial aquifer has recovered sufficiently to maintain MDS in the stream.

(c) Whenever the chief engineer determines that hydrologic conditions indicate that MDS values have been met or exceeded and are likely to be maintained for the foreseeable future, MDS administration may be declared by the chief engineer to be no longer necessary even if both of the conditions of subsection (b) have not been met.

This regulation shall be effective on and after August 27, 2002. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-703a, 82a-703b, and 82a-703c; effective, T-5-4-29-02, April 29, 2002; effective Aug. 27, 2002.)

K.A.R. 5-15-4. Standards for minimum desirable streamflow. The streamflow trigger values, temporary surface water diversion thresholds, and well pumping allowances set forth in the following table shall be used whenever appropriate in these regulations.

MDS gaging station	streamflow trigger value	temporary surface water diversion threshold	well pumping allowance
Republican River Concordia	150 percent of the daily average MDS value* for the 60 preceding days	115 percent of MDS value* for a period of at least five days	32 percent of the maximum annual quantity of water that has not been diverted under the authority of that water right or approval of application, at the time MDS administration begins
Republican River Clay Center	150 percent of the daily average MDS value* for the 60 preceding days	100 percent of MDS value* for a period of at least five days	32 percent of the maximum annual quantity of water that has not been diverted under the authority of that water right or approval of application, at the time MDS administration begins

* “MDS value” means the minimum desirable streamflow value established by K.S.A. 82a-703c, and amendments thereto.

This regulation shall be effective on and after August 27, 2002. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-703a, 82a-703b, and 82a-703c; effective, T-5-4-29-02, April 29, 2002; effective Aug. 27, 2002.)

K.A.R. 5-16-1. Definitions. As used in this article of regulations, in the Kansas water appropriation act, and by the chief engineer in the administration of the Kansas water appropriation act, unless the context clearly requires otherwise, the following words and phrases shall have the meanings ascribed to them in this regulation. (a) “Base water right” means a vested or certified water right or rights for which the owner applies to the chief engineer to establish a flex account pursuant to K.S.A. 82a-736, and amendments thereto.

(b) “Good standing,” only as used in K.S.A. 82a-736, and amendments thereto, in reference to base water rights, means a base water right that meets the following conditions:

- (1) Has been lawfully exercised within the five-year time period specified in K.A.R. 5-16-5;
 - (2) has had all required water use reports filed and any civil fines assessed for failure to timely file a complete and accurate water use report paid; and
 - (3) has had no five-consecutive-year period of nonuse since December 31, 1990, except for enrollment in the water right conservation program according to K.A.R. 5-7-4 and enrollment in the federal conservation reserve program or other multiyear federal or state conservation program.
- (c) “Significant water conservation measures” means actual physical changes in a water distribution system or management practices that improve water use efficiency, including the following:
- (1) Conversion from flood irrigation to center pivot irrigation with a nozzle package designed to improve water use efficiency;
 - (2) irrigation scheduling;
 - (3) conversion to subsurface drip irrigation; and
 - (4) removal of an end gun, resulting in a significant reduction in the number of irrigated acres. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 2001 Supp. 82a-736; effective Oct. 11, 2002.)

K.A.R. 5-16-2. Fee to establish flex account and apply for term permit. The filing fee for establishing a flex account and applying for a five-year term permit to exercise the flex account shall be \$400. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 2001 Supp. 82a-708a(d), as amended by L. 2002, Ch. 181, § 21; effective Oct. 11, 2002.)

K.A.R. 5-16-3. Establishing a flex account. (a) A flex account shall be established by filing an application for a flex account and a term permit on a form prescribed by the chief engineer. The five-year period shall begin on January 1 of the next calendar year for which the application has been timely filed, unless expressly authorized by the chief engineer to begin the following January 1. The application shall also show the location of all wells located within one-half mile of the proposed point of diversion, and the names, addresses, and telephone numbers of the owners of those wells. Except as set forth in subsection (e), a separate application shall be filed for each water right and each point of diversion for which the owner desires to establish a flex account. Each application shall be accompanied by the filing fee specified in K.A.R. 5-16-2.

(b) Before any application to establish a flex account and a term permit will be accepted for filing, the application shall be signed by at least one owner of the water right, or a duly authorized agent of an owner of the water right.

(c) Before the flex account can be established or the term permit approved, all of the water rights owners, or a duly authorized agent of the owners, shall verify upon oath or affirmation that the statements contained in the application are true and complete.

(d) If one or more owners refuse to sign the application or if a written request is filed by one or more of the owners to withdraw their signatures from the application before the application is approved, the application shall be dismissed.

(e) A single application to establish a flex account and apply for a term permit may be filed in the following situations:

(1) Multiple water rights authorize the diversion of water from a single point of diversion that diverts water to an identical place of use for a single type of use.

(2) Multiple points of diversion are authorized by the chief engineer to divert water through a single water flowmeter before going to an identical place of use.

(f) The flex account shall not be established, and the term permit to exercise the flex account shall not be valid until both have been approved by the chief engineer. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 2001 Supp. 82a-736; effective Oct. 11, 2002.)

K.A.R. 5-16-4. Conditions on the term permit. (a) The place of use authorized by a term permit shall be identical to the place or places of use authorized by the base water right or rights.

(b) The type of use authorized by a term permit shall be limited to one of the types of use authorized by the base water right or rights.

(c) The rate of diversion authorized by a term permit shall not exceed the maximum instantaneous rate of diversion authorized by the base water right or rights. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 2001 Supp. 82a-736; effective Oct. 11, 2002.)

K.A.R. 5-16-5. Maximum annual quantity of water authorized by term permit. (a) Except as set forth in subsections (b) through (e), the maximum quantity of water deposited in a flex account and authorized to be diverted in five consecutive calendar years under the authority of a term permit shall be determined in accordance with K.S.A. 82a-736, and amendments thereto, by means of these calculations:

(1) Adding the total actual legal annual water use of the base water right or rights for the period of 1996 through 2000;

(2) dividing that total quantity of water by five;

(3) multiplying that quantity by 0.9; and

(4) multiplying that quantity by five.

(b) If significant water conservation measures were implemented under the base water rights during any time during the period of 1996 through 2000, the average annual quantity of water actually used may be calculated using the five consecutive calendar years immediately preceding the implementation of significant water conservation measures, but these five calendar years shall not

begin before calendar year 1991. The five-year allocation under the term permit shall be determined by means of these calculations:

- (1) Adding the total actual legal annual water use of the base water right or rights for the five consecutive calendar years;
- (2) dividing that total quantity of water by five;
- (3) multiplying that quantity by 0.9; and
- (4) multiplying that quantity by five.

(c) If water use records for a base water right are inadequate to accurately determine actual water use during any calendar year during the five-year period, then that year shall be counted as having no water use.

(d) No flex account shall be allowed if the flex account is inconsistent with the provisions of any intensive groundwater use control area created pursuant to K.S.A. 82a-1036 through K.S.A. 82a-1040, and amendments thereto.

(e) If water was authorized to be diverted for less than five consecutive calendar years, the five-year allocation shall be determined by means of these calculations:

- (1) Adding the total annual quantity of water actually legally diverted during the five-year period;
- (2) dividing the total quantity by the number of years, or parts thereof, that water was authorized to be diverted by the chief engineer;
- (3) multiplying that quantity by 0.9; and
- (4) multiplying that quantity by five.

Water rights that authorized use of water for less than two entire calendar years during the five-year period shall not be eligible for a flex account. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 2001 Supp. 82a-736; effective Oct. 11, 2002.)

K.A.R. 5-16-6. Flex accounts and term permits. (a) The duration of the flex account and term permit shall be five consecutive calendar years.

(b) There shall be no extension of a flex account or a term permit beyond the period of five consecutive calendar years originally authorized.

(c) There shall be no carryover of unused quantities of water from one flex account or term permit to another flex account or term permit.

(d) Only one flex account shall be in force for a point of diversion or a water right at any time.

(e) A water flowmeter meeting the requirements of the chief engineer shall be installed on each point of diversion authorized by the term permit. If an existing water flowmeter had been required on or after September 22, 2000 or if there is no existing water flowmeter, the water flowmeter shall meet the requirements of the chief engineer in effect at the time the term permit is approved. If a water flowmeter was installed before September 22, 2000, the water flowmeter shall meet the requirements of K.A.R. 5-1-6(b).

(f) Only an entire water right, or a portion of a water right that has been formally divided, may be deposited in a flex account.

(g) All water diverted pursuant to a term permit and the base water rights associated with the term permit shall be counted against the quantity of water deposited in the flex account. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 2001 Supp. 82a-736; effective Oct. 11, 2002.)

K.A.R. 5-16-7. Conditions under which a base water right may be exercised. Each term permit approved by the chief engineer according to this article shall include the condition that if the term permit can no longer be exercised because of an order issued by the chief engineer, including an intensive groundwater use control area order, a minimum desirable streamflow order, or an order to administer water rights to prevent impairment, then any base water right may be exercised to the extent that all of the following conditions are met:

(a) The base water right is in priority.

(b) The annual quantity of water authorized by the base water right has not been diverted during that calendar year.

(c) The five-year allocation authorized by the term permit has not been used.

(d) The use of water under the base water right does not impair water rights senior to the base water right. (Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 2001 Supp. 82a-736; effective P- October 11, 2002.)

K.A.R. 5-30-1. Approval of or permits for dams. The chief engineer shall not approve or grant a permit for any dam subject to the jurisdiction of the chief engineer under the authority of K.S.A. 1979 Supp. 82a-301 through 305a as amended, unless the applicant also receives prior approval of his or her application to appropriate water for beneficial use to be diverted by means of the dam for which the approval or permit is sought, unless the sole proposed use for the water is for domestic use. (Authorized by K.S.A. 82a-706a, 82a-709; effective May 1, 1980.)